STIC-Biotech/ChemLib

82028

From: Sent: To: Subject:



Salimi, Ali Tuesday, December 10, 2002 1:52 PM STIC-Biotech/ChemLib 09/701,080

Can you please conduct a search for the application serial no. 09/701,080, including interference search for the following sequences:

SEQ ID NO: 1, and 18

Thanks!

Ali Salimi AU 1648 Room 9D07 Mailbox 8E12

Searcher:
Phone:
Location:
Date Picked Up: 13/20
Date Completed: 1913/10
Searcher Prep/Review:
Clerical:
Online time:

TYPE OF SEARCH:	
NA Sequences:	
AA Sequences:	
Structures:	
Bibliographic:	_
Litigation:	
Full text:	
Patent Family:	
Other:	_

VENDOR/COST (where applic.)
STN:
DIALOG:
Questel/Orbit:
DRLink:
Lexis/Nexis:
Sequence Sys.:
WWW/Internet:
Other (specify):

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Dec. 13 09:02:58 2002
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OM protein - protein search, using sw model Total number of hits satisfying chosen parameters: Title: Perfect score: Searched: Scoring table: Run on: BLOSUM62 US-09-701-080C-18 851 262574 seqs, December 13, 2002, 08:38:20; Search time 21.3067 Seconds Gapop 10.0 , Gapext 0.5 MFQDPQERPRKLPQLCTELQ......WTGRCMSCCRSSRTRRETQL 151 GenCore version 5.1.3 Copyright (c) 1993 - 2002 Compugen Ltd. 29422922 residues (without alignments)
208.519 Million cell updates/sec 262574

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100%

Listing first 45 summaries

Database : Issued_Patents_AA:* /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/BCTUS_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result

No.	Score	Match	1	DB	ID	Description
_	843	99.1	162	1	N.	Sequence 3, Appl
2	843	99.1	266	u	-08-860-165-	10
ω	843	99.1	266	4	S-09-359-3	
4	843	99.1	266	4	-09-367-309A	1, 7
ر.	843		273	4	-09-485-885-4	4
6	843	99.1	292	4	-09-485-885-	10,
7	843	99.1	371	4	-09-485-885-6	0
œ	843	99.1	390	4	-09-485-885-	14
9	840	98.7	162	Ľ	;-08-316-239в	4, 2
10	539		172	ω	-08-860-165	12
11	539		172	4	-382-	12,
12	487		172	ω	60-165-	14,
13	487	•	172	4	-359-3	
14	479	•	182	1	-117-083-1	10,
15	469.5	•	158	ນ	-08-247-904E	
16	469.5	55.2	ഗ	ω	US-08-767-942A-19	19,
17	469.5	•	~	ᆫ	US-08-117-083-14	14,
18	469.5		7	4	US-09-485-885-21	N
19	469.5	•	æ	4	-485-885-	23,
20	320	٠	368	4	00-094-2	20,
21	320		~	4	US-09-000-094-22	e 22,
22	320	37.6	465	4	US-09-000-094-24	24
23	320	37.6	1587	4	US-09-000-094-46	Œ
24	163	19.2	30	\vdash	US-08-363-586-4	4,
25	120	14.1	21	N	-915-16	16
26	115	13.5	20	2	US-08-934-915-165	Sequence 165,
27	115	13.5	21	N	-915-16	

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1 MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 60

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Mismatches

Indels

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Gaps

0;

115 13.5 32 4 US-08-164-768-2 115 13.5 32 4 US-08-164-768-2 107 12.6 20 2 US-08-934-915-45 107 12.6 20 2 US-08-934-915-163 104 12.2 20 2 US-08-934-915-163 104 12.2 20 2 US-08-934-915-163 104 12.2 20 2 US-08-934-915-163 11.5 20 2 US-08-934-915-162 11.4 20 2 US-08-934-915-160 11.4 20 2 US-08-934-915-160 11.3 32 1 US-08-934-915-61	5 13.5 13.5 13.5 13.6 20.2 12.6 20.2 12.6 20.2 12.6 20.2 11.5 20.2 11.4 20.2 11.4 20.2 11.3 20.2 11.3 20.2 10.6 11.3 20.2 10.6 11.3 20.2 10.6 11.3 20.2 10.6 11.3 20.2 10.6 11.3 20.2 10.6 11.3 20.2 10.6	45	44	43	42	41	40	39	38	37	36	35	34	<u>3</u> 3	32	31	30	29	0
256 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	32 4 US-08-164-768-2 32 4 US-08-134-768-2 32 US-08-934-915-45 32 US-08-934-915-45 32 US-08-934-915-44 32 US-08-934-915-163 32 US-08-934-915-163 32 US-08-934-915-163 32 US-08-934-915-163 32 US-08-934-915-163 32 US-08-934-915-163 33 US-08-934-915-163 34 US-08-934-915-163 35 US-08-934-915-163 36 US-08-934-915-163 37 US-08-934-915-163 38 US-08-934-915-163 39 US-08-934	80.5	82	85	85	85	90	96	96	97	97	98	98	104	107	107	109	115	TTO
	4 US-08-164-768-72 Sequence 2 US-08-934-915-45 Sequence 2 US-08-934-915-163 Sequence 2 US-08-934-915-160 Sequence 2 US-08-934-915-161 Sequence 2 US-08-940-768-4 Sequence 2 US-08-889-402-1 Sequence 2 US-08-889-402-1 Sequence 2 US-08-889-402-2 Sequence 2 US-08-889-402-2 Sequence 3 US-08-889-402-2 Sequence 4 US-08-804-166-2 Sequence 5 US-08-804-166-2 Sequence	9.5	9.6	10.0	10.0	10.0	10.6	11.3	11.3	11.4	11.4	11.5	11.5	12.2	12.6	12.6	12.8	13.5	T
4 US-08-164-768-2 2 US-08-934-915-45 2 US-08-934-915-163 2 US-08-934-915-163 2 US-08-934-915-164 2 US-08-934-915-162 2 US-08-934-915-162 2 US-08-934-915-162 2 US-08-934-915-161 1 US-08-934-915-161 1 US-08-934-915-161 1 US-08-934-915-161 2 US-08-934-915-165-2 2 US-08-899-402-1 2 US-08-889-402-1 4 US-08-075-541D-52	-08-164-768-2 -08-164-768-2 -08-934-915-44 -08-934-915-163 -08-934-915-163 -08-934-915-163 -08-934-915-164 -08-934-915-160 -08-934-915-161 -08-934-915-161 -08-934-915-161 -08-934-915-2 -08-934-915-2 -08-934-915-2 -08-934-915-2 -08-934-915-2 -08-934-915-3 -08-934-915-3 -08-934-915-3 -08-934-915-3 -08-934-915-3 -08-934-915-161 -08-934	256	15	605	591	15	23	32	32	20	20	20	20	20	20	20	20	32	7.0
US-08-934-915-45 US-08-934-915-44 US-08-934-915-164 US-08-934-915-164 US-08-934-915-164 US-08-934-915-160 US-08-934-915-160 US-08-934-915-160 US-08-934-915-61 US-08-934-915-61 US-08-934-915-61 US-08-934-915-61 US-08-934-915-61 US-08-934-915-62 US-08-934-915-62 US-08-934-915-63 US-08-899-402-1 US-08-899-402-1 US-08-899-402-1 US-08-899-402-2 US-08-899-402-2 US-08-899-402-2 US-08-899-402-2 US-08-899-402-2 US-08-899-402-2 US-08-899-402-2 US-08-899-402-2	-08-164-768-2 -08-164-768-2 -08-934-915-44 -08-934-915-163 -08-934-915-163 -08-934-915-163 -08-934-915-164 -08-934-915-160 -08-934-915-161 -08-934-915-161 -08-934-915-161 -08-934-915-2 -08-934-915-2 -08-934-915-2 -08-934-915-2 -08-934-915-2 -08-934-915-3 -08-934-915-3 -08-934-915-3 -08-934-915-3 -08-934-915-3 -08-934-915-161 -08-934	4	4	N	2	۳	μ	4	μ	2	N	2	N	2	N	N	N	4	۲
		US-08-804-166-2		US-08-889-402-2	-08-889		US-08-363-586-3	US-08-164-768-4	US-08-466-285-4	US-08-934-915-161	US-08-934-915-160	US-08-934-915-162	US-08-934-915-159	US-08-934-915-164	US-08-934-915-163	US-08-934-915-44			-00-400-203

ALIGNMENTS

US-08-316-239B-3

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US-08-316-239B-3
Query Match
Best Local Similarity 99...
150; Conservative
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                                                                                                                                                                                                                           TELEFAX: (703) 803-9387 INFORMATION FOR SEQ ID NO:
                                                                                                     TOPOLOGY: not
MOLECULE TYPE:
HYPOTHETICAL: 1
                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Jagtlan; ***
                                                                                                                                                                                                                                                      NAME: Jagtlani, Ajay A.

NAME: Jagtlani, Ajay A.

REGISTRATION NUMBER: 35,205

REFERENCE/DOCKET NUMBER: UNI

TELECOMMUNICATION INFORMATION:

TELEPHONE: (703) 817-9453
                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/316,239
FILING DATE: 30-SEP-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: 6120
CTTY: Centreville
                                                                                                                                                      TYPE: amino acid
STRANDEDNESS: not
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                                                                                                                                                                                        162 amino acids
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Parmenter, Cheryl A.
Parmenter, Cheryl A.
VENTION: Methods and a Diagnostic Aid for
VENTION: Distinguishing a Subset of HPV that is Associated
VENTION: Increased Risk of Developing Cervical Dysplasia an
VENTION: Cervical Cancer
                                                                                                                                         not relevant
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NO
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99.3%;
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                                   Score 843;
Pred. No. 2
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                                 DB 1;
2.8e-82;
                                                  Length 162;
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                                                                                                                                                                                                                                                                                                     US-09-359-382-10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILE REFERENCE: 17227/130

CURRENT APPLICATION NUMBER: US/08/860,165A

CURRENT FILING DATE: 1997-09-22

EARLIER APPLICATION NUMBER: PCI/AU95/00868

EARLIER FILING DATE: 1995-12-20

EARLIER APPLICATION NUMBER: AU PN0157

EARLIER FILING DATE: 1994-12-20

NUMBER OF SEQ ID NOS: 15

SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-860-165-10
                                                                                                                   GENERAL INFORMATION:
APPLICANT: EDWARDS, Stirling John
APPLICANT: COX, John Cooper
APPLICANT: WEBB, Elizabeth Ann
APPLICANT: WEBB, Elizabeth Ann
APPLICANT: FRAZER, Ian
TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
FILE REFERENCE: 017227/0148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: EDWARDS, Stirling John
APPLICANT: COX, John Cooper
APPLICANT: WEBB, Elizabeth Ann
APPLICANT: FRAZER, Ian
                                                                                                                                                                                                                                                              Patent No. 6306397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 10
LENGTH: 266
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
CURRENT APPLICATION NUMBER: US/09/359,382
CURRENT FILING DATE: 1999-07-23
EARLIER APPLICATION NUMBER: US 08/860,165
EARLIER FILING DATE: 1997-09-22
EARLIER APPLICATION NUMBER: PCI/AU95/00868
EARLIER APPLICATION NUMBER: PCI/AU95/00868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                      121 KKQRFHNIRGRWTGRCMSCCRSSETRRETQL 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           83
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99.3%;
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RESULT 5 US-09-485-885-4

Sequence 4, Application US/09485885 Patent No. 6342224 GENERAL INFORMATION:

APPLICANT: Bruck, Claudine

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; LENGTH: 266
; TYPE: PRT
; ORGANISM: Human papillomavirus type
US-09-367-309A-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EARLIER APPLICATION NUMBER: AU PN0157/94
EARLIER FILING DATE: 1994-12-20
NUMBER OF SEQ ID NOS: 27
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 10
                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 6
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 1
                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1, Applic Patent No. 6428807
                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches 150;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/367,309A CURRENT FILING DATE: 1999-08-11 PRIOR APPLICATION NUMBER: PCT/AU98/00080 PRIOR FILING DATE: 1998-02-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: MALLIAROS, JIM
TITLE OF INVENTION: CHELATING IMMUNOSTIMULATING COMPLEXES
FILE REFERENCE: 017227/0149
                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: AU PO 5178 PRIOR FILING DATE: 1997-02-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: MACFARLAN, RODERICK I. APPLICANT: MALLIAROS, JIM
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                 121 KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
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                                                                                                                                                   1 MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 60
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                                                                                    AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
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                                                                  AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
                                                                                                                                 MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 67
KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL
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Pred. No. 4.9e-82;
0; Mismatches 1
                                                                                                                                                                                                                      Score 843; DB 4; Pred. No. 4.9e-82;
 158
                                                                                                                                                                                                                                    Length 266;
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Cabezon Silva, Teresa

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APPLICANT: Bruck, Claudine
APPLICANT: Cabezon Silva, Teresa
APPLICANT: Delisse, Anne-Marie Eva Fernande
APPLICANT: Gerard, Catherine Marie Ghislaine
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Best Local Similarity
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SEQ ID NO 4
                                                                                                               Matches 150;
                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                          SOFTWARE: 1
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PRIOR APPLICATION NUMBER: GB 9
PRIOR APPLICATION 1997-08-22
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PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR APPLICATION NUMBER: 1997-08-22
                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/485,885
CURRENT FILLING DATE: 2000-02-18
PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
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CURRENT FILING DATE: 2000-02-18
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TITLE OF INVENTION: Vaccine
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TYPE: PRT
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                                                               MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 60
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                                                MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 192
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Gerard, Catherine Marie Ghislaine
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Pred. No. 5e-82;
0; Mismatches
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Pred. No. 5.4e-82;
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LENGTH: 371
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Patent No. 6342224
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SEQ ID NO 14
LENGTH: 390
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APPLICANT:
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CURRENT APPLICATION NUMBER: US/09/485,885
CURRENT FILING DATE: 2000-02-18
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                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/485,885
CURRENT FILING DATE: 2000-02-18
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                                                                 PRIOR APPLICATION NUMBER: GB PRIOR FILING DATE: 1997-08-22
                                                                                                    PRIOR APPLICATION NUMBER: PCT PRIOR FILING DATE: 1998-08-17
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                                    SOFTWARE:
                                               PRIOR FILING DATE: 1
NUMBER OF SEQ ID NOS:
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ORGANISM: Homo sapien
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Gerard, Catherine Marie Ghislaine
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Gerard, Catherine Marie Ghislaine
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US-08-316-239B-4
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                                                                                                                                                                                                   Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (703) 803-9387 INFORMATION FOR SEQ ID NO: 4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: ITTLE 
                                                                                                                                                                                                                                                                                                                             STRANDEDNESS:
TOPOLOGY: not
MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION: 435
CLASSIFICATION: 435
CLASSIFICATION: 435
ATTORNEY_AGENT INFORMATION:
NAME: Jagtiani, Ajay A.
NAME: Jagtiani, Ajay A.
35,205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 35,205
REFERENCE/DOCKET NUMBER: UN
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 817-9453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: Patentin Rel
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                     HYPOTHETICAL: NO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121 KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       253 KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/0 FILING DATE: 30-SEP-1994
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150;
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6126 Rocky Way Court
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PERMION: Methods and a Diagnostic Aid for

VENTION: Distinguishing a Subset of HPV that is Associated with an

VENTION: Increased Risk of Developing Cervical Dysplasia and

VENTION: Cervical Cancer
                                                                                                                                                                                                                                                                                                                                                                       not relevant
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                                                                                                                                                                                                                                                                                                                                    protein
                                                                                                                                                                                                                                                                                                                                                                                                          not relevant
                                                                                                                                                                    98.7%;
98.7%;
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99.3%;
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                                                                                                                             Score 840; DB 1;
Pred. No. 5.8e-82;
1; Mismatches 1
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                                                                                                                                                                                                Length 162;
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                                                                             CURRENT APPLICATION NUMBER: US/09/359,382
CURRENT FILING DATE: 1999-07-23
EARLIER APPLICATION NUMBER: US 08/860,165
EARLIER FILING DATE: 1997-09-22
EARLIER APPLICATION NUMBER: PCT/AU95/00868
EARLIER FILING DATE: 1995-12-20
EARLIER FILING DATE: 1995-12-20
EARLIER FILING DATE: 1994-12-20
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SOFTWARE: PatentIn Ver. 2
SEQ ID NO 12
LENGTH: 172
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                  SOFTWARE: PatentIn Ver. SEQ ID NO 12
                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: EDWARDS, Stirling John
                                                                                                                                                                                                                                                                                                                                                                                                                      Patent No. 6306397
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Best Local Similarity
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CURRENT APPLICATION NUMBER: US/08/860,165A

CURRENT FILING DATE: 1997-09-22

EARLIER APPLICATION NUMBER: PCT/AU95/00868

EARLIER FILING DATE: 1995-12-20

EARLIER FILING DATE: 1995-12-20

EARLIER FILING DATE: 1994-12-20
                                                                                                                                                                                                                                                               TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS FILE REFERENCE: 017227/0148
                                                                                                                                                                                                                                                                                                         APPLICANT: COX, John Cooper APPLICANT: WEBB, Elizabeth Ann APPLICANT: FRAZER, Ian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: WEBB, Elizabeth Ann APPLICANT: FRAZER, Ian
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                                                             NUMBER OF SEQ ID NOS: 27
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ORGANISM: Artificial Sequence
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LENGTH: 172
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Pred. No. 5.
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.9e-50;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 15
SOFTWARE: PATENTIN VET. 2.0
SEQ ID NO 14
LENGTH: 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: EDWARDS, Stirling John
APPLICANT: EDWARDS, John Cooper
APPLICANT: WEBB, Elizabeth Ann
APPLICANT: FRAZEK, Ian
APPLICANT: FRAZEK, Ian
TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
FILE REFERENCE: 17227/130
                                                                                                                                                                                                                                       GENERAL
                                                                                                                                                                                                                                                        Sequence 14, Application US/09359382 Patent No. 6306397
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Patent No. 6004557
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Best Local Similarity
      APPLICANT: EDWARDS, Stirling John
APPLICANT: WEBB, ELIZABETH Ann
APPLICANT: WEBB, ELIZABETH Ann
APPLICANT: WEBB, ELIZABETH Ann
APPLICANT: TRAZER, Ian
TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
TILE REFERENCE: 017227/0148
CURRENT APPLICATION NUMBER: US/09/359,382
CURRENT FILING DATE: 1999-07-23
EARLIER APPLICATION NUMBER: US 08/860,165
EARLIER APPLICATION NUMBER: DCT/AU95/00868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/08/860,165A CURRENT FILING DATE: 1997-09-22 EARLIER APPLICATION NUMBER: PCT/AU95/00868 EARLIER FILING DATE: 1995-12-20 EARLIER APPLICATION NUMBER: AU PN0157 EARLIER FILING DATE: 1994-12-20 NUMBER SECOLIA NOC. 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                  61 AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYN 93
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                                                                                                                                                                                                                                                                                                                                                                         AVCDKCLKFYSKISEYRHYCYSLYGTTLRSHHH 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                        MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 136
                                                                                                                                                                                                                                     INFORMATION:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Application US/08860165A
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93.5%;
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Pred. No. 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 487; DB 3
Pred. No. 2e-44;
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.9e-50;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-117-083-10
US-08-117-083-10
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-- rocal Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 10, Appli
Patent No. 5719054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 27
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 14
                                                                                                                                                                                                  TELEFAX: 415-398-3249
TELEX: 910 277299
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08,
FILING DATE: 10-SEP-1993
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Dreger, Walter H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EARLIER APPLICATION NUMBER: AU PN0157/94
EARLIER FILING DATE: 1994-12-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 172
TYPE: PRT
                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: A-TELECOMMUNICATION INFORMATION: 415-781-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: RECOMDANIAL TITLE OF INVENTION: Papilloma
                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
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                                                                                                    MOLECULE TYPE:
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               LOCATION: 1..182
OTHER INFORMATION:
OTHER INFORMATION:
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                                                                                                                                STRANDEDNESS:
                                                                                                                                                                                                                                                                                                     REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
                                                                  NAME/KEY:
                                                                                                                     TOPOLOGY:
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                                                                                                                                                                 LENGTH:
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Dreger, Walter H.
Dreger, William H.
Dreger, Walter H.
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                                                                                                                                               amino acid
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                                                                                                                                                                 182 amino acids
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Inglis, Stephen C.
Munro, Alan J.
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                                                                                                                ss: single
linear
                                                                  Protein
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                                                                                                  protein
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93.5%;
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              /note= "Xaa refers to stop codon in
the open reading frame."
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co Center,
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Pred. No. 2e-44;
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Query Match

56.3%;

Score 479;

DB 1;

Length 182;

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; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-247-904B-10
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                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: Vincent, Matthew P.
REGISTRATION NUMBER: 36,709
REFERENCE/DOCKET NUMBER: MIV-029.01
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 832-1000
TELEFAX: (617) 832-7000
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
FRANCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 15
                                                                                                                                                                                                                   Query Match 55.2%; Score 469.5; DB 2; Length 158; Best Local Similarity 56.1%; Pred. No. 1.3e-42; Matches 87; Conservative 22; Mismatches 41; Indels 5
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GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 62.2%;
Matches 97; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/NS-DOS
SOFTWARE: ASCII(text)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/247,904B
FILING DATE: 23-MAY-1994
CLASSIFICATION: 530
NUMBER: NATIONAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: Foley, Hoag & Eliot
STREET: One Post Office Square
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Rolfe, Mark
APPLICANT: Eckstein, Jens W.
APPLICANT: Draetta, Giulio
TITLE OF INVENTION: Human Ubiquitin Conjugating Enzyme
NUMBER OF SEQUENCES: 17
                 122 KQRFHNIRGRWTGRCMSCCRSSR-----TRRETQL 151 |:||||| |: |:|| ||| :| ||||||:
124 KRRFHNIAGHYRGQCHSCCNRARQERLQRRRETQV 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 KKQRFHNIRGRWTG-----RCMSCCRSSRTRRETQL 151
                                                                   61 AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                            9
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                                                                                                                                                                                2 FQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPYA 61
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5: Mismatches 8;
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Search completed: December 13, 2002, 08:45:20 Job time: 22.3067 secs

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RESULT 15
AAY25381
ID AAY25
XX AAY25
XX AAY25
XX O6-SE
DT 06-SE
DT 06-SE
DT WX FUSIC
                                                                                                                                                                                                                                                                                                                                                                                                                Matches 150;
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This sequence represents a chimeric E6 or E7 protein or E6/E7 fusion protein from Human papillomavirus (HPV) linked to an immunological fusion partner, in this case, a fragment of the Haemophilus influenzae B protein D. The sequence also contains a histidine tag at the C-terminus of the encoded protein. The protein can be used in a vaccine, for immuno-therapeutically treating HPV induced tumour lesions (benign or malignant) and preventing HPV viral infection.
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Chimeric -
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 Fusion protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bruck C, Cabezon S
Lombardo-Bencheikh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-AUG-1998;
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                                HPV fusion protein CLYTA-E6E7-His/HPV16.
                                                                    06-SEP-1999
                                                                                                  AAY25381;
                                                                                                                                 AAY25381 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
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                                                                                                                                                                                                              KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
                                                                                                                                                                                                                                                                                                AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
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DB; AAX29782.
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                                                                                                                                                                                                                                                                               AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
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Haemophilus influenzae.
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                                                                (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AA;
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 E6
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 protein;
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                                                                                                                                                                                                                                                                                                                                                                                                             Score 843; DB Pred. No. 2.7e 0; Mismatches
                                                                                                                                   390
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 E7
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 protein; E6/E7;
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                                                                                                                                                                                                                                                                                                                                                                                                                            843; DB 20;
No. 2.7e-82;
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immunomodulator; tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CMG;
                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 371;
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Search completed: December Job time: 60.362 secs
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Best Local S
Matches 150
                                                                                                                                                                                                                                                                                              AAX78791-X78801 represent nucleic acid sequences which encode novel constructs comprising an E6 or E7 protein or E6/E7 fusion protein from HPV (represented in AAY25375-Y25386). These constructs are optionally linked to an immunological fusion partner and an immunomodulatory CpG oligonucleotide. The products of the invention can be used to induce immune response in a patient to an HPV antigen. They can also be used for preventing or treating HPV induced tumours.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
Human papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                    Composition comprising induce immune response
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1999-405485/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dalemans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24-DEC-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             immunological fusion partner; CpG oligonucleotide;
HPV antigen; prevention; treatment.
                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                              Example
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WLJ,
                                                                                                                                                                                                                                                                       390 AA;
                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gerard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97GB-0027262
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                                                                                                                                                                                                                 Score 843; DB 20;
Pred. No. 2.9e-82;
0; Mismatches 1;
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                                                                                                                                                                                                                                                                                                                                                                                                            English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     fusion
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RESULT 12
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AC AAY02
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Best Local
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                                                                                                                                                                                                                                                                                                                                This sequence represents a chimeric E6 or E7 protein or E6/E7 fusion protein from Human papillomavirus (HPV) linked to an immunological fusing partner, in this case, a fragment of the Streptococcus pneunoniae CLYTA protein of the encoded protein. The protein can be used in a vaccine, for immuno-therapeutically treating HPV induced tumour lesions (benign
                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human Papilloma Virus (HPV) fusion proteins - useful in treatment or prophylaxis of HPV induced lesions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chimeric - Chimeric -
                                                                                                                                                                                                                                                                                                               or malignant) and preventing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N-PSDB; AAX29784.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-190587/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bruck C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chimeric;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-JUN-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS
                                                                             133
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                                                                                                   1 MFQDPQERPRKLPQLCTELQTT1HDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   \vdash
AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
                                                                        MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
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                                                                                                                                                                         150;
                                                                                                                                                                                                  Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human papillomavirus.
Streptococcus pneumoniae.
                                                                                                                                                                                                                                                                   292 AA;
                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fig 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
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on; benign; m
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                                                                                                                                                                                          99.18;
99.38;
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99.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               English.
                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Delisse AEF,
                                                                                                                                                                                          Score 843; DB 20;
Pred. No. 2.1e-82;
                                                                                                                                                                                                                                                                                                                 HPV viral infection.
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Pred. No. 2.1e-82;
                                                                                                                                                                       Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gerard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CMG;
                                                                                                                                                                                                                Length 292;
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                                                                                                                                                                                                                                                                                                                                                                                                      fusion
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RESULT 13
AAY25377
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KW Fusio
KW Inmun
KW HPV a
XX Synth
OS Synth
OS Human
XX HO0993
XX HO0993
XX HO0993
XX AAY1
PF 18-DE
XX AAY1
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DR WPI;
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                                                                                                                                                                                                                                                                                                                                                                             Composition comprising induce immune response
                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1999-405485/34
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HPV antigen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HPV fusion protein D1/3-E6E7-His/HPV16
                                                                                                                                                                                                                                                                                                                                                      Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dalemans WLJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-DEC-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fusion
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 234
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                                                                61 AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
                                                                                                                                                                          Local
                                                                                                                      1 MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL
                          KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
                                                      AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
                                                                                                        MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
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                                                                                                                                                             150;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       papillomavirus
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                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                   III; Page 50; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                      AAX78793
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                                                                                                                                                                                                                  371 AA;
                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              l fusion partner; CpG c
prevention; treatment.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gerard CMG
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                                                                                                                                                                          99.1%;
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93
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                                                                                                                                                             0;
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                                                                                                                                                             Score 843; DB 20;
Pred. No. 2.7e-82;
0; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                           E7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein; E6/E7; imm
CpG oligonucleotide;
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                                                                                                                                                                                                                                                                                                                                                                                           fusion
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RESULT 14 AAY02633

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RESULT 10
AAY02632
ID AAY02632
XX AAY02
AC AAY02
XX Chime
KW Chime
KW Ctumou
XX Chime
COS Chime
XX WO991
XX W0991
XX W0991
XX W17-AU
XX 22-AU
XX X 21-AU
XX X 11-AU
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linked to an immunological fusion partner and an immunomodulatory CpG oligonucleotide. The products of the invention can be used to induce a immune response in a patient to an HPV antigen. They can also be used for preventing or treating HPV induced tumours.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Composition comprising induce immune response
                                                                                                                                                                                                                                                                                                                                                                                                                                                Chimeric -
Chimeric -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ΨPV
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This sequence
                                                                                                                                                                                                                                                                                                                                                                   04-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chimeric;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                constructs comprising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAX78791-X78801
                                        Disclosure;
                                                                      Human Papilloma Virus (HPV) treatment or prophylaxis of
                                                                                                                                                                                             Lombardo-Bencheikh A;
                                                                                                                                                                                                             Bruck C,
                                                                                                                                                                                                                                                     (SMIK)
                                                                                                                                                                                                                                                                                           22-AUG-1997;
                                                                                                                                                                                                                                                                                                                               17-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                          WO9910375-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Prot.D1/3-E6-His/HPV16 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAY02632
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                234
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   78791-X78801 represent nucleic acid sequences which encode novel structs comprising an E6 or E7 protein or E6/E7 fusion protein from (represented in AAY25375-Y25386). These constructs are optionally
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1999-405485/34.
DB; AAX78792.
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                                                                                                                                                      1999-190587/16.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 150;
                                                                                                                                                                                                                                                   SMITHKLINE BEECHAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          lesion;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      II; Page 48-49; 62pp;
                                                                                                                                    AAX29781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ε6;
                                                                                                                                                                                                               Cabezon Silva T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           273
                                                                                                                                                                                                                                                                                                                                                                                                                                                Human papillomavirus.
Haemophilus influenza
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represents
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                                                                                                                                                                                                                                                                                           97GB-0017953
                                                                                                                                                                                                                                                                                                                             98WO-EP05285
                                    3; 95pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      benign; malignant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      fusion
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99.3%;
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                                      English
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chimeric
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HPV induced
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                                                                                                                                                                                                               Delisse AEF,
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Pred. No. 1.9e-82;
0; Mismatches 1.
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                                                                                            proteins
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E6
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or
                                                                            lesions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        D; vaccine; immunotherapy; infection.
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E7
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    useful

protein
                                                                                                                                                                                                               CMG;
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or
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E6/E7
                                                                                              vaccines
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RESULT 11
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ID AAY25379
XX AAY25
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DT 06-S
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DT 06-S
DT 06-S
SO SYN
KW Fus;
KW HPV
XX SYN
OS SYN
KW Limmin
KW HPV
XX AY
OS SYN
OS Hun
XX HPV
XX PN WO;
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DR 10
DR 11
XX Y
DR 12
XX Y
DR 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
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                                                                       AAX78791-X78801 represent nucleic acid sequences which encode novel constructs comprising an E6 or E7 protein or E6/E7 fusion protein fro HPV (represented in AAX25375-Y25386). These constructs are optionally linked to an immunological fusion partner and an immunomodulatory CpG oligonucleotide. The products of the invention can be used to induce immune response in a patient to an HPV antigen. They can also be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAY25379;
                                                                                                                                                                                                                                                 Example VI; Page 52-53; 62pp; English.
                                                                                                                                                                                                                                                                                                    Composition comprising induce immune response
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dalemans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      immunological fusion partner; CpG o HPV antigen; prevention; treatment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HPV fusion protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-SEP-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-DEC-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 114 MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 173
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                                                     preventing
                                                                                                                                                                                                                                                                                                                                                                            1999-405485/34.
DB; AAX78795.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    WLJ,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  E6 protein; E7 protein; E6/E7; immunomodulator; tumour;
usion partner; CpG oligonucleotide; immune response;
                                                     treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLYTA-E6-His/HPV16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Protein;
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Pred. No. 1
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.9e-82;
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ulatory CpG
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Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The fragment of DNA contg. the HPV-16 E6/E7 coding region was prepd. by PCR from plasmid pER322/HPV16 (Durst et al., PNAS, 80: 3812 (1983)) using oligonucleotides SO5 and SO6. The prod. of the third reading frame is the EFV-16 E6 protein whereas the second reading frame encodes HPV-16 E7. The E6 and E7 ORFs are fused together to form a single continuous ORF via site directed mutagenesis and the immortilising potential of E7 is removed by altering two key codons of the HPV E7 sequence. The single ORF of HPV-16 E6/E7 may be inserted into vaccinia virus DNA at neutral sites (pref. by inserting two sets of the DNA in opposite orientations to overcome the problem of intertypic recombination) to make a recombinant virus vector for use immunotherapeutically to activate cells of the immune system against HPV. See also AAF27723-43.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Recombinant virus vectors encoding human papillomavirus - for treating and vaccinating against HPV infections ar conditions caused by them, such as cervical cancer
                                                                                                                                                                                                                    Human papilloma virus; E6; E7; deletion mutant; HPV; immune response; humoral immune response; cellular immune
                                                                                            27-JUN-1996
                                                                                                                                                            Human papilloma
                                                                                                                                                                                                     vaccine.
                                                                                                                                                                                                                                                                       Human papilloma virus E6/E7 protein variant.
                                                                                                                                                                                                                                                                                                            11-JAN-1997
                                                                                                                                                                                                                                                                                                                                                                                AAR97561 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Fig la; 83pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1992-349219/42.
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                    20-DEC-1994;
                                                      20-DEC-1995;
                                                                                                                             WO9619496-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               150;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    263 AA;
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                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Inglis SC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  91GB-0005383
                    94AU-0000157
                                                        95WO-AU00868
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                                                                                                                                                                                                                                                                                                                                                                                    A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 263;
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and
                                                                                                                                                                                                                    response;
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RRESULT 9
AAX25376
ID AAX2
XX
AAX25376
AC AAX2
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DT 06-S
XX
DT 06-S
XX
HPV
XX
Synt
KW HPV
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Synt
COS Human
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W099
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W099
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W099
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W099
XX
XX
HD
PT 18-D
XX
XX
PR 24-D
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Best Local :
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N-PSDB; AAT31833.
                                                                                                                                                               08-JUL-1999
                                                                                                                                                                                                                                   Human papillomavirus
                                                                                                                                                                                                                                                        Synthetic.
                                                                                                                                                                                                                                                                                                                                                                 HPV fusion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAY25376 standard; Protein;
                    Dalemans WLJ,
                                                                                          24-DEC-1997;
                                                                                                                            18-DEC-1998;
                                                                                                                                                                                                   WO9933868-A2
                                                                                                                                                                                                                                                                                                                                                                                                   06-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                        AAY25376;
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                                                    (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS.
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(UYQU ) UNIV QUEENSLAND
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                                                                                                                                                                                                                                                                                         antigen;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         266 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                    Gerard CMG
                                                                                          97GB-0027262
                                                                                                                             98WO-EP08563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99.1%;
99.3%;
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A variant of the human papilloma virus (HPV) E6 or E7 protein which elicits a humoral and/or cellular immune response against HPV can be used in vaccines against HPV or to treat HPV infection. The variant is preferably a deletion mutant comprising at least half, and preferably two-thirds of full length E6 or E7 protein starting from the N- or C-terminal, or is a full length E6 molety fused to a full length E7 molety. The variant optionally has a linkage molety and a foreign protein or peptide which facilitates the purification of, and enhances the immunogenicity of, the fusion protein. This sequence is a full length E6/E7 fusion protein.
                        Fusion protein; E6 protein; E7 protein; E6/E7; immunomodulator; tumour; immunological fusion partner; CpG oligonucleotide; immune response;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Vaccine variants of human papilloma virus antigens - contain variants of E6 and/or E7 protein, pref. deletion mutants, and are used to treat or prevent HPV infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 1; Page 15-16; 37pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121 KKORFHNIRGRWTGRCMSCCRSSRTRRETQL 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
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                                                                                                                               protein D1/3-E6-His/HPV16
prevention; treatment.
                                                                                                                                                                                                                                                                                                                                        273
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Pred. No. 1.8e-82;
0; Mismatches 1;
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RESULT 6
ARRA 3865
ID AARR
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AC AARI
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DT 28--
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DE HPV
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                                                                                                                                                                                                                                                                                                                                                                                                                            Methods have been developed for distinguishing a subset of human capacitions virus (HFV) that is associated with an increased risk of developing cervical (HFV) that is associated with an increased risk of cervical preparing a cervical sample to expose any HFV-16 E6 gene in the sample and determining if the base at position 350 of the E6 gene (see AAT94723 and AAT94724 for comparison) is T or G, where the presence of G at position 350 is associated with an increased risk of developing cervical dysplasia or cervical cancer; and (2) preparing a cervical sample to expose any HFV-16 E6 protein in the sample and determining if the amino acid at position 83 of the protein (see position 90 in C2 AAW35741 and AAW35742 for comparison) is Val or Leu, where the presence of Val at position 83 that is associated with an increased risk of cervical dysplasia or cervical cancer. The present sequence crepresents the reference protein sequence for HFV-16 E6. The 350G CC variant correlates well with Pap scores: 350T:350G ratios among 45 CC LNII; 2:9 for CIN III; 0:3 for cancer.
                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
              Protein
                                   Key
Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-SEP-1994;
28-SEP-1993;
                                                                  Human
                                                                                               HPV; HPV16; E6
                                                                                                                                         28-JUN-1995
                                                                                                                                                              AAR63865;
                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            detecting variant form
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Evaluating risk of cervical dysplasia or cervical cancer -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Parmenter CA,
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                                                                                       cervix cancer.
                                                                                                                    HPV16 E6/E7
                                                                                                                                                                                 AAR63865 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (UYNE-) UNIV
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                                                                                                                                                                                                                                                 KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
                                                                                                                                                                                                                                                                               AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
                                                                                                                                                                                                                                     KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 158
                                                                papillomavirus
                                                                                                                                                                                                                                                                                                                                                                   150;
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                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                           162 AA;
                                                                                                                    proteins
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                                                                                                                                         (first entry)
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                                                                                               protein;
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93US-0127906.
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               /label= E6_protein
159..188
                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                           99.1%;
99.3%;
                                                                  strain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            of human papilloma virus 16
                                                                                               E7
                                                                                               protein;
                                                                                                                                                                                   188
                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                Score 843; DB 1
Pred. No. 1e-82;
0; Mismatches
                                                                                                                                                                                  À
                                                                                               diagnosis; cervical dyplasia;
                                                                                                                                                                                                                                                                                                                                                                                      DB 18;
                                                                                                                                                                                                                                                                                                                                                                 1;
                                                                                                                                                                                                                                                                                                                                                                                     Length 162;
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RESULT 7
AAR27725
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The sequences of the E6 and E7 polypeptide-encoding regions of hump papillomavirus (HPV) 16 and 18 are given in AAQ75470-71 and the encoded proteins in AAR63865-66, respectively. Probes and primers based on these sequences were used for HPV infection diagnosis; expression of E6 and E7 is diagnostic for cervical cancer or pre-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human papilloma virus de self sustained sequence detector probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1995-006821/01.
P-PSDB; AAQ75470.
                                                                                                                                                                      Virus vector; amplification;
                                                                                                                                                                                                                                                            09-MAR-1993
                                                                                                                                                                                                                                                                                             AAR27725;
                                                                                                                                                                                                                                                                                                                               AAR27725 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   malignant states.
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01-OCT-1992
                                W09216636-A
                                                                                                     Key
                                                                                                                                       Human
                                                                                                                                                                                                                          HPV 16
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                                                                                   Peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
                                                                                                                                                                                                                                                                                                                                                                                                                  KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                150;
                                                                                                                                     papillomavirus 16
                                                                                                                                                                                                                    E6 protein fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   188 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                    vaccinia virus; papillomavirus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     93US-0058920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94WO-US05085
                                                                                                                                                                       immunotherapeutic
                                                                  /note= "HPV-16 E6 protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /label= E7_protein
                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                             Protein; 263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99.1%;
99.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     detection assay -
ce replication and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       79pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 843; DB 16;
Pred. No. 1.2e-82;
                                                                                                                                                                                                                                                                                                                               A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                    158
                                                                                                                                                                                                                                                                                                                                                                                                                                                      151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       by amplification using hybridisation with a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16;
                                                                                                                                                                                        HPV; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 188;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             67
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10-MAR-1992;

92WO-GB00424.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SXCCCCCCCCCXXX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
Matches 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        papillomavirus) comprising a compound capable of reducing, inhibit or otherwise decreasing the activity of a protein encoded by an M gene by facilitating disruption of a chelated metal cation domain present in the protein. An agent of the present invention can be to treat cervical cancer or its HPV associated precursor lesions other HPV associated cancers and/or warts. The present sequence represents a human papillomavirus E6 protein containing two zinc finger motifs, as given in the exemplification of the present
                                                                                                                                                                                                    Human papillomavirus; human l
HPV; epitope; T cell; identif
neoplastic growth; antiviral.
          WPI; 2001-381497/40
                                Sette A,
                                                       (EPIM-)
                                                                            10-DEC-1999;
15-AUG-2000;
                                                                                                             11-DEC-2000; 2000WO-US33549
                                                                                                                                    14-JUN-2001
                                                                                                                                                           WO200141799-A1
                                                                                                                                                                                Human papillomavirus
                                                                                                                                                                                                                                                 Human papillomavirus protein HPV16
                                                                                                                                                                                                                                                                        22-AUG-2001
                                                                                                                                                                                                                                                                                               AAB98420;
                                                                                                                                                                                                                                                                                                                    AAB98420 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes an agent used in the treatment or prophylaxis of a disease caused or exacerbated by MPV (mammallan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Polysulfide and dithionodisulfide agents, useful for the treatment or prophylaxis of diseases caused by mammalian papillomavirus, are disruptors of a chelated metal cation domain in an MPV gene encoded
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bernard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein
                                                                                                                                                                                                                                                                                                                                                                            128
                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                        89
                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KKORFHNIRGRWTGRCMSCCRSSRTRRETQL
                                                                                                                                                                                                                                                                                                                                                                                       KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
                                                                                                                                                                                                                                                                                                                                                                                                                     AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
                                                                                                                                                                                                                                                                                                                                                                                                                                           AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
                                                       EPIMMUNE INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                               Sidney J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Fig 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                             2000US-0641528
                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AA;
                                                                                         99US-0172705
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  78pp;
                                                                                                                                                                                                                                                                                                                     Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99.1%;
99.3%;
                                Southwood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Beerheide
                                                                                                                                                                                                                human leukocyte antigen; identification; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    English.
                                                                                                                                                                                                                                                                                                                     158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 843; DB 2
Pred. No. 1e-82;
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                                                                                                                                                                                                                                                                                                                    A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ting
                                Chesnut
                                                                                                                                                                                                                                                 E6
                                                                                                                                                                                                                                                                                                                                                                           158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ΑE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 21;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ۲,
                                                                                                                                                                                                                HLA; immune infection; q
                                Celis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 158;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ₹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                               Ħ
                                                                                                                                                                                                                genital
                                                                                                                                                                                                               response;
genital wart;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       inhibiting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             an MPV
                               품
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   67
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immunosuppressive epitopes that may be present in whole antigens can be avoided with the use of epitope-base vaccines. An additional advantage is the ability to combine selected epitopes (CTL and HTL) and to modify the composition of the epitopes achieving enhanced immunogenicity, the major benefit of the vaccine is that is safe and efficacious. AAB98391 to AAB98477 represent polypeptide sequences used in the exemplification
                                                                                                                                                                                                                                                                                                                                     specifically in the treatment or prophylaxis of HPV infection, in person who have not manifested symptoms e.g. genital warts or neoplastic growth. The peptides can also be used in a tetramer staining assay to assess peripheral blood mononuclear cells for the presence of antigen-specific CTLs following exposure to a pathogen or immunogen, and as reagents to evaluate immune recall responses or evaluate the efficacy of a vaccine.
                                      to AAB9847/ repof the present
                                                                                                                                                                                                                               The vaccine compositions are useful for removing warts or treating HP infections. The epitopes for inclusion in an epitope-base vaccine may be selected from conserved regions of viral or tumour associated antigens, which reduces the likelihood of escape mutants, also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      from the present invention are useful for stimulating an immune response to HPV by stimulating the production of CTL or HTL responses,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (HPV) epitope (I). (I) has antiviral activity, and can be used in vaccine production. Peptides and corresponding nucleic acid compositions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention describes an isolated prepared human papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     treating HPV infections
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                An isolated human papilloma virus (HPV) epitope, useful in vaccines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Page
                                                 invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             756pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    growth
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Query Match
Best Local
                                                                                                   Matches
                                                                                                                                    Sequence
128
                121
                                 89
                                                61
                                                                   8
        KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
                               MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 60
KKORFHNIRGRWTGRCMSCCRSSRTRRETQL
                                                                                                   150;
                                                                                                           Similarity
                                                                                                                                     158
                                                                                                   Conservative
                                                                                                                                     AA;
                                                                                                          99.1%;
99.3%;
                                                                                                   0;
                                                                                                          Score 843; DB 2
Pred. No. 1e-82;
                                                                                                  Mismatches
. 158
                                                                                                                  DB 22;
                                                                                                   1;
                                                                                                                   Length 158;
                                                                                                   Indels
                                                                                                   0
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                                 127
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RESULT 5
AAW35741
US5679509-A
                                            Misc-difference
                                                                                                      Human
                                                                                                                                        Complete
                                                                                                                                                               Human
                                                                                                                                                                                                           AAW35741;
                                                                   Misc-difference
                                                                                                                                                                                    16-FEB-1998
                                                                                                                                                                                                                                  AAW35741 standard;
                                                                                                                                                            papillomavirus type 16 E6 protein.
                                                                                                    papillomavirus
                                                                                                                          genome; cir
dysplasia;
                                                                                                                                                                                    (first
                                             159
                                                                           Location/Qualifiers
                                 /note=
                                                                                                                                       circular; human papillomavirus type
                                                        note=
                                                                                                                                                                                                                                  Protein;
                                                                                                                             cervical
                                                                                                                                                                                    entry)
                                                                                                     type
                                                        "Mutated to Val
                                 "End of
                                                                                                                                                                                                                                  162
                      residues
                                                                                                                             cancer;
                                protein
                                                                                                                                                                                                                                  AA
                                                                                                                             cervical smear
                      are
                                sequence
                                                        in the variant"
                     given
                                 even
                      following
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16;

HPV16

21-OCT-1997

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ID AAR22766 standard; F
XX AAR22766;
XX AAR22766;
XX DT 21-SEP-1992 (first
XX DE HPV E6 peptide.
XX Human; papillomaviru
KW cancer.
XX Human; papillomaviru
KW cancer.
XX PPN W09205248-A.
XX PPN W09205248-A.
XX PP 26-SEP-1991; 91WO-U
XX PP 26-SEP-1991; 90US-0
XX PF 26-SEP-1990; 90US-0
XX PF 26-SEP-1990; Hers
XX PF 26-SEP-1990; 90US-0
XX PF 26-SEP-1990; Hers
XX PF 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 2
AAR22766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              망
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAR22766 standard; peptide; 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                       (BRIM ) BRISTOL-MYERS SQUIB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MFQDDQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     papillomavirus; immunogenic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            151 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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                                                                                                                                                                                                                                                                          90US-0588384
                                                                                                                                                                                                                                                                                                                                              91WO-US07081
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                                                                                                                                       Hellstrom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 851; DB 21; Pred. No. 1.3e-83; Mismatches 0;
                                                                                                                                       Hellstrom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cervical;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          151
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        warts; carcinoma;
                                                                                                                                   Hu
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RESULT 3
AAY82462
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                                                                                                                                                                                                                                                                                                                                                                                         XX AC X
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The peptide is the sequence of the human papillomavirus HPV 16 E6 nucleoprotein. Peptides corresponding to regions (pref. epitopic regions) of HPV 16 E6 were synthesised by standard Merrifield synthesis. Examples of such peptides are E6 1-20, 8-20, 119-134 or 148-158. Compositions contg. these peptides, antibodies against the peptides, or recombinant cells contg. the gene encoding the immunogenic peptides may be utilised in methods for inhibiting and treating HPV infection and tumour initiation and progression e.g. in the prevention or retardation of cervical warts and cervical carcinoma resulting from HPV infection.
                                                                                                                                                                                                                                                                                                        Chelated zinc finger; therapeutic; treatment; prophylaxis; MPV; mammalian papillomavirus; antiviral; cytostatic; cervical cance
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Immunogenic peptide(s) derived from E6 or E7 region of HPV16 and recombinant cells encoding them, useful in treatment and prophylaxis of cervical warts or cancer resulting from HPV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Fig 7; 81pp; English.
                                                     04-SEP-1998;
15-JUL-1999;
                                                                                                                                                    WO200014063-A1
                                                                                                                                                                                            Misc-difference
                                                                                                                                                                                                                       Misc-difference
                                                                                                                                                                                                                                                               Human papillomavirus.
                                                                                                                                                                                                                                                                                                                                               Human papillomavirus E6 protein containing two zinc finger motifs.
                                                                                                                                                                                                                                                                                                                                                                            30-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                         AAY82462;
                                                                                                                                                                                                                                                                                                                                                                                                                                   AAY82462 standard; Protein; 158
             (MOLE-) INST MOLECULAR & CELL BIOLOGY. (HUGH/) HUGHES E J L.
                                                                                               03-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            See also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         infection
                                                                                                                          16-MAR-2000
                                                                                                                                                                                                                                                                                            lesion; wart
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             . Local 150;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                158 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                     98AU-0005733.
99AU-0001645.
                                                                                              99WO-AU00724
                                                                                                                                                                                                                        Location/Qualifiers 37..73
                                                                                                                                                                                            110..146
                                                                                                                                                                                 /note=
                                                                                                                                                                                                         /note= "forms a zinc finger motif"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99.1%;
                                                                                                                                                                              "forms a zinc finger motif"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 843; DB 13;
Pred. No. 1e-82;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 158
                                                                                                                                                                                                                                                                                                           cervical cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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Title:
Perfect score:
Sequence:
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Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 03
Maximum Match 1008
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Total number of hits satisfying chosen parameters:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        on:
                                        score
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           įs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 seq length: 0
seq length: 2000000000
No. is the number of results predicted by chance to have greater than or equal to the score of the result being predicted by analysis of the total score distribution.
                                                                                                                         A_Geneseq_101002:*

1: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1980.DAT:*

2: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1981.DAT:*

3: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1982.DAT:*

4: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1983.DAT:*

4: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1984.DAT:*

5: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1984.DAT:*

6: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1985.DAT:*

7: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1986.DAT:*

8: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1987.DAT:*

9: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1989.DAT:*

10: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1989.DAT:*

11: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1990.DAT:*

12: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1990.DAT:*

13: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1993.DAT:*

14: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1993.DAT:*

15: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1993.DAT:*

16: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1993.DAT:*

17: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1993.DAT:*

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19: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1993.DAT:*

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21: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1993.DAT:*

22: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1993.DAT:*

23: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1993.DAT:*

23: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1993.DAT:*

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851
1 MFQDPQERPRKLPQIA
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Gapop 10.0 ,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              908470 seqs, 133250620 residues
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gapext 0.5
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                                    printed,
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SUMMARIES

Result No.	Score	Query Match Length DB	Length	80	ID	Description
ш	851	100.0	151	21	AAY57808	HPV-16 E6 protein
2	843	99.1	158	13	AAR22766	HPV E6 peptide. S
w	843	99.1	158	21	AAY82462	Human papillomavir
4	843	99.1	158	22	AAB98420	Human papillomavir
տ	843	99.1	162	18	AAW35741	Human papillomavir
σ	843	99.1	188	16	AAR63865	HPV16 E6/E7 protei
7	843	99.1	263	13	AAR27725	HPV 16 E6 protein
80	843	99.1	266	17	AAR97561	Human papilloma vi
9	843	99.1	273	20	AAY25376	HPV fusion protein
10	843	99.1	273	20	AAY02632	Prot.D1/3-E6-His/H

Novel polypeptides cells useful for treating viral disease and cancer

WPI; 2000-072620/06.

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11
197	310	320	320	320	320	320	321	331	332	441.5	460.5	469.5	469.5	469.5	469.5	469.5	469.5	469.5	469.5	469.5	469.5	477	487	534	538	594	799.5	840	843	843	843	843	843	843
	٠	7.	7.	7.	7.	7.	7.	8.	9.	۲	4	5	5	5	5	5.	5	5	5	5	5	6.	7.	2	ω	9.	ω	œ	9.	9.	9.	9	99.1	9
119	150	1587	465	375	368	150	150	117	236	155	158	383	383	278	278	271	158	158	158	158	158	172	172	149	149	149	243	162	390	390	371	371	292	292
22	22	18	18	18	18	22	22	22	22	22	22	20	20	20	20	13	22	21	20	16	16	17	17	22	22	14	20	18	20	20	20	20	20	20
AAB96051	AAB98413	AAW01816	AAW01810	AAW01809	AAW01808	AAB98404	AAB98395	AAB96050	AAB96052	AAB98452	AAB98440	AAY02642	AAY25386	AAY02641	AAY25385	AAR27728	AAB98427	AAB03176	AAY39968	AAR63866	AAR79656	AAR97562	AAR97563	AAB98447	AAB98434	91	g,	*	\circ	AAY25381	5	AAY25377	263	AAY25379
Polyepitope polype	Human papillomavir	Polyepitope polype	Polyepitope polype		Human papillomavir	Prot.D1/3-E6-E7-Hi	HPV fusion protein	Prot.D1/3-E6-His/H	HPV fusion protein		papi	HPV-18 E6 protein.	E6 pr	36/E	E6 protei	papilloma v			apillor	HPV E6 region prod	Papillomavirus E6/	Human papillomavir	CLYTA-E6E7-His pro	۳.	T.	HPV fusion protein	-	HPV fusion protein						

ALIGNMENTS

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RRESULT 1
RAXY5708
ID AAY5
XX AAY5
XX AAY5
XX AAY5
XX TAA
DE HPV-
XX Tran
XW Creb
KW Ceill
KW vira
XX Vira
XX W099
XX 
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                                                                                                                                                                              O'Connor MJ,
                                                                                                                                                                                                                                                                                                                                                       26-MAY-1998;
05-JAN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human papillomavirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAY57808 standard; peptide; 151
                                                                                                                                                                                                                                                                (MOLE-) INST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02-DEC-1999
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                                                                                                                                                                                                                                                                     MOLECULAR & CELL
                                                                                                                                                                              Zimmermann
                                                                                                                                                                                                                                                                                                                                                       98GB-0011303.
99GB-0000157.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99WO-GB01668.
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                                                                                                                                                                                                                                                                         BIOLOGY.
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Minimum DB
Maximum DB
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Perfect score:
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     Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                      833
469.5
469.5
90.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     seq length: 0 seq length: 2000000000
     protein search, using sw model
     Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-701-080C-18
851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           239201 segs, 67110966 residues
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pending_Patents_AA_New:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Listing
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/cgn2_6/ptodata/1/paa/USO8_NEW_COMB.pep:*
/cgn2_6/ptodata/1/paa/USO9_NEW_COMB.pep:*
/cgn2_6/ptodata/1/paa/USO9_NEW_COMB.pep:*
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(c) 1993 - 2002 Compugen Ltd
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Matches 151
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Sequence 54561, Sequence 54562,		Sequence 54559,	Sequence 54558,	Sequence 54557,	Sequence 54556,	Sequence 54555,	Sequence 54554,	Sequence 54562,	Sequence 54561,	Sequence 54560,	Sequence 54559,	Sequence 54558,	Sequence 54557,	Sequence 54556,	Sequence 54555,	Sequence 54554,	Sequence 54547,
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RESULT 2
US-09-581-976B-4
; Sequence 4, Application US/09581976B
; GENERAL INFORMATION:
; APPLICANT: Dalemans, Wilfried L.J.
; APPLICANT: Gerard, Catherine Marie Ghislaine
; TITLE OF INVENTION: Vaccine
; FILE REFERENCE: B45124
; CURRENT APPLICATION NUMBER: US/09/581,976B
; CURRENT FILING DATE: 2000-06-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS: 36
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 18
LENGTH: 151
TYPE: PRT
ORGANISM: Human papillomavirus
US-09-701-080C-18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: INSTITUTE OF MOLECULAR AND CELL BIOLOGY TITLE OF INVENTION: POLYPEPTIDES FROM CREB BINDING TITLE OF INVENTION: TRANSCRIPTIONAL REGULATION FILE REFERENCE: N73477C GCW
                                                                                                                                                                                                                                                                                                                                                      121 KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            h 100.0%; Score 851; DB 5;
Similarity 100.0%; Pred. No. 2.6e-84;
51; Conservative 0; Mismatches 0;
                                                                                                        , Wilfried L.J.
Catherine Marie Ghislaine
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US-09-581-976B-10
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US-09-581-976B-10
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PRIOR FILING DATE: 1998-12-18
PRIOR APPLICATION NUMBER: GB 9727262.9
PRIOR FILING DATE: 1997-12-24
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PRIOR FILING DATE: 1998-12-18
PRIOR APPLICATION NUMBER: GB 9727262.9
PRIOR FILING DATE: 1997-12-24
NUMBER OF SEQ ID NOS: 28
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ORGANISM: Artificial Sequence
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                    KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL
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AVCDKCLKFYSKISEYRHYCYSL7GTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
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Pred. No. 3.6e-83;
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Pred. No. 3.4e-83;
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; FEATURE:
; OTHER INFORMATION: Chimaeric protein (Clyta from Streptococcus; OTHER INFORMATION: pneumoniae and E6E7 fusion from Human papil; OTHER INFORMATION: virus type 16)
US-09-581-976B-14
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SEQ ID NO 14
LENGTH: 390
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APPLICANT: Dalemans,
APPLICANT: Gerard, (
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Best Local
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TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45124
CURRENT APPLICATION
CURRENT APPLICATION
                                                                                                                                                                                                                            CURRENT FILING DATE: 2000-06-20
PRIOR APPLICATION NUMBER: PCT/EP98/08563
PRIOR FILING DATE: 1998-12-18
PRIOR APPLICATION NUMBER: GB 9727262.9
PRIOR FILING DATE: 1997-12-24
NUMBER OF SEQ ID NOS: 28
                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Dalemans, Wilfried L.J.
APPLICANT: Gerard, Catherine Marie Ghislaine
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45124
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                ORGANISM: Artificial Sequence
                                                                                                                                              TYPE: PRT
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nes 150; Conserv
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                             and E6E7 fusion from Human papilloma
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Pred. No. 4.5e-83;
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E6E7 fusion from Human papill
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Query Match

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Score 843;

DB 5;

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; ORGANISM: Human
US-10-177-390-6
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                                                                                                                                                                                                                                                                                                               Sequence 21, Application US/09581976B GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Schuler, Gerold
APPLICANT: N.V. Antwerps Innovatiecentrum
TITLE OF INVENTION: Improved Transfection of Eucaryotic
TITLE OF INVENTION: Polynucleotides by Electroporation
FILE REFERENCE: 021505wo/JH/ml
CURRENT APPLICATION NUMBER: US/10/177,390
CURRENT APPLICATION NUMBER: US/10/177,390
NUMBER OF SEQ ID NOS: 34
NUMBER OF SEQ ID NOS: 34
                                                      NUMBER OF SEQ ID NOS:
SOFTWARE: FastSEQ for
SEQ ID NO 21
LENGTH: 278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 148;
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Best Local (
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                                                                                                                                                                                                                                                          APPLICANT: Dalemans, Wilfried L.J.
APPLICANT: Gerard, Catherine Marie Ghislaine
TITLE OF INVENTION: Vaccine
                                                                                                                           PRIOR APPLICATION NUMBER: GB 9727262.9 PRIOR FILING DATE: 1997-12-24
                                                                                                                                                               PRIOR APPLICATION NUMBER: PCT/EP98/08563 PRIOR FILING DATE: 1998-12-18
                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/581,976B CURRENT FILING DATE: 2000-06-20
                                                                                                                                                                                                                                         FILE REFERENCE: B45124
                 TYPE: PRT
ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 151
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98.0%;
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Pred. No. 2.3e-82;
1; Mismatches 2;
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                                                                                                          RESULT 9
US-10-240-851-107
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Sequence 107, Application US/10240851
GENERAL INFORMATION:
APPLICANT: John P. Carulli et al.
TITLE OF INVENTION: THE HIGH BONE MASS GENE
FILE REFERENCE: 032796-021
CURRENT APPLICATION NUMBER: US/10/240,851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 23
LENGTH: 383
TYPE: PRT
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Best Local
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NUMBER OF SEQ ID NOS: 28
SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/581,976B CURRENT FILING DATE: 2000-06-20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: PCT/EP98/08563 PRIOR FILING DATE: 1998-12-18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: Chimaeric protein (protein D from Haemoplilus OTHER INFORMATION: influenza B and E6E7 fusion from Human papillu OTHER INFORMATION: virus type 18)
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                                                                                                                                                                                                                      122
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                                                                                                                                                                                                                                                                                                                                  115 FEDPTRRPYKLPDLCTELNTSLQDIEITCVYCKTVLELTEVFEFAFKDLFVVYRDSIPHA 174
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                                                                                                                                                                                                                                                                                                                                                                                                                         Local
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                                                                                                                                                                                                       | KQRFHNIRGRWTGRCMSCCRSSR----TRRETQL 151
                                                                                                                                                                                                                                                          ACHKCIDFYSRIREIRHYSDSVYGDTLEKLTNTGLYNLLIRCLRCQKPLNPAEKLRHLNE
                                                                                                                                                                                                                                                                                          VCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLDK 121
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                                                                                                                                                                                  KRRFHNIAGHYRGQCHSCCNRARQERLQRRRETQV
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87; Conserv
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56.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                       55.2%; Score 469.5; DB 5; 56.1%; Pred. No. 7.1e-43;
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Pred. No. 5.
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Gaps

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APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative splicing
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
SOFTWARE: Patentin version 3.2
SEQ ID NO 54539
LENGTH: 479
TYPE: PRT
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US-09-724-676-54539
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SEQ ID NO 107
LENGTH: 572
TYPE: PRT
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PRIOR APPLICATION NUMBER: US 09/544,398
PRIOR FILING DATE: 2000-04-05
PRIOR APPLICATION NUMBER: US 09/543,771
PRIOR FILING DATE: 2000-04-05
PRIOR APPLICATION NUMBER: US 09/229,319
PRIOR FILING DATE: 1999-01-13
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PRIOR FILING DATE: 1998-01-13
PRIOR APPLICATION NUMBER: US 60/105,511
PRIOR FILING DATE: 1998-10-23
420
                                 122
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Local Similarity 23.5%;
les 43; Conservative 2
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                                                                                                                                          QVVTAMGKTWHPEHFVCTHCQEEIGSRNFFE-----RDGQPY--CEK--DYHNLF
--GFHEKDGKAYCRKDYFDMFAPKCGGCARA 448
                                 KQRFHNIRGR------WTGRCMSCCRS 142
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19.9%;
                                                                     -NGPILDKVVTALDRTWHPEHFFCAQCGAFFGPE----
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RESULT 13
US-09-724-676-54542
; Sequence 54542, Application
; GENERAL INFORMATION:
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US-09-724-676-54540
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CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
SOFTWARE: Patentin version 3.2
SEQ ID NO 54540
LENGTH: 479
TYPE: PRT
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SOFTWARE: PatentIn version 3.2
SEQ ID NO 54541
LENGTH: 479
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GENERAL INFORMATION:
APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative splicing
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION UNMERE: US/09/724,676
CURRENT FILING DATE: 2000-11-28
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Best Local Similarity
Matches 30; Conserv
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APPLICANT: Compugen LTD
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Pred. No. 0.
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RESULT 15
US-09-724-676-54544
; Sequence 54544, Application US/09724676
; GENERAL INFORMATION:
APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative splicing
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676
; CURRENT FILING DATE: 2000-11-28
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CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
SOFTWARE: Patentin version 3.2
SEQ ID NO 54543
LENGTH: 479
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GENERAL INFORMATION:
APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative splicing
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676
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SOFTWARE: PatentIn version 3.2
SEQ ID NO 54542
LENGTH: 479
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ORGANISM: Homo sapiens
NUMBER OF SEQ ID NOS:
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completed: December 13, me : 25.0859 secs
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                                                       --GFHEKDGKAYCRKDYFDMFAPKCGGCARA 448
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BLOSUM62
Gapop 10.0 , Gapext 0.5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         December 13, 2002, 08:37:10; Search time 252.902 Seconds (without alignments) 384.951 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MFQDPQERPRKLPQLCTELQ......WTGRCMSCCRSSRTRRETQL 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pending_Patents_AA_Main:*
://ggn2_6/ptodata/1/paa/US084_COMB.pep:*
//ggn2_6/ptodata/1/paa/US085_COMB.pep:*
//ggn2_6/ptodata/1/paa/US086_COMB.pep:*
//ggn2_6/ptodata/1/paa/US086_COMB.pep:*
//ggn2_6/ptodata/1/paa/US087_COMB.pep:*
//ggn2_6/ptodata/1/paa/US089_COMB.pep:*
//ggn2_6/ptodata/1/paa/US099_COMB.pep:*
//ggn2_6/ptodata/1/paa/US090_COMB.pep:*
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Copyright (c) 1993 - 2002 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /cgn2_6/ptodata/1/paa//PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/paa/US06_COMB.pep:*
/cgn2_6/ptodata/1/paa/US07_COMB.pep:*
/cgn2_6/ptodata/1/paa/US080_COMB.pep:*
/cgn2_6/ptodata/1/paa/US081_COMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /cgn2_6/ptodata/1/paa/US082_COMB.pep:
/cgn2_6/ptodata/1/paa/US083_COMB.pep:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

6	5	4	ω	2	1	Result No.	
843	843	843	843	843	851	Score	
99.1	99.1	99.1	99.1	99.1	100.0	Query Match Length DB ID	P
292	273	273	158	158	151	Length	
19		19		سو	21	DB ID	
US-09-581-976-10	US-10-000-903-4	US-09-581-976-4	US-09-980-523A-2	PCT-US00-33549-31	US-09-701-080A-18	ID	
Sequence 10, Appl	Sequence 4, Appli	Sequence 4, Appli	Sequence 2, Appli	Sequence 31, Appl	Sequence 18, Appl	Description	

Qy

1 MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 60

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	œ	7
320	320	320	320	320	321	331	331	332	332	332	332	332	332	441.5	•	9	9.	9		.9	69.	ω	ω	799.5	811	811	816	816	833	835	840	840	840	843	843	843	843	4
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US-09-000-004-46	-09-000-004-	-09-000-004	-09-000-004-		33549-	US-09-664-225-126	0-25559-	225-	-25559-	-225-	-US00-25559-	-09-664-225-	-US00-25559-	-US00-33549-	-US00-33549-	-10-000-903-	-09-581-976-	US-10-000-903-21	-09-581-976-	US-08-176-937A-4	PCT-US00-33549-38	-US00-33549-	PCT-US00-33549-45	-09-462-993-	5	-60-415-929-	0-415-	-60-415-929-	-09-177-390-	-60-415-929-	-60-415-929-	-60-415-929-	-60-306-8	00-903-	1-976-	00-903-	US-09-581-976-6	00-903-
46,	equence 2	22,	e 20,	15,	6,	e 126,	126,	e 160,	160,	e 158,	58,	e 157,	157,	63,	51, 7	equence 23, App	23,	e 21,	e 21	4,	38,	58,	4 5,	1, 2	11,	Sequence 9, Appli	υ ,	ω	6, Appl	7,	Ø	13,	20,	14,	14,	e 6,	e 6, App	Sequence 10, Appl

ALIGNMENTS

Best Local Similarity Matches 151; Conser	Query Match	US-09-701-080A-18	; ORGANISM:	; TYPE: PRT	; LENGTH: 151	; SEQ ID NO 18	; SOFTWARE:	; NUMBER OF	; PRIOR FILE	; PRIOR APPL	; PRIOR FILI	; PRIOR APPL	; CURRENT FI	; CURRENT AP	; FILE REFER	; TITLE OF I	; TITLE OF I	; APPLICANT:	; APPLICANT:	; GENERAL INFORMATION:	; Sequence 18	US-09-701-080A-18	RESULT 1
vat		A-18	ORGANISM: Human papillomavirus		51	80	SOFTWARE: PatentIn Ver. 2.1	NUMBER OF SEQ ID NOS: 36	PRIOR FILING DATE: 1999-01-05	PRIOR APPLICATION NUMBER: GB 9900157.0	PRIOR FILING DATE: 1998-05-26	PRIOR APPLICATION NUMBER: GB 9811303.8	CURRENT FILING DATE: 2001-02-27	CURRENT APPLICATION NUMBER: US/09/701,080A	FILE REFERENCE: 117-328	TITLE OF INVENTION: TRANSCRIPTIONAL REGULATION	NVENTION: POLYE	APPLICANT: ZIMMERMAN, HOLGER	APPLICANT: O'CONNOR, MARK J.	ORMATION:	Sequence 18, Application US/09701080A	A-18	
100.0%; Pred			navirus				2.1)1-05	GB 9900157)5-26	GB 9811303)1-02-27	ER: US/09/70		SCRIPTIONAL	PEPTIDES FRO)LGER	J.		IS/09701080A		
.0%; Pred. No. le-80; O; Indels	Score 851; DB 21;									.0		. 80		1,080A		REGULATIO	M CREB BIN						
, 0,	21;															z	DING						
Indels	Length 151;																PROTEIN						
0;	151;																AND R						
0; Gaps																	ELATED						
0;																	PROTEIN AND RELATED PROTEIN P30	٠,	•				
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Sequence 2, Application US/09980523A
GENERAL INFORMATION:
APPLICANT: CHOPPIN, JEANNINE
APPLICANT: GOURLLET, JEAN-GERARD
APPLICANT: GUILLET, JEAN-GERARD
APPLICANT: GUILLET, JEAN-GERARD
APPLICANT: CONNAN, FRANCINE
APPLICANT: CONNAN, FRANCINE
TITLE OF INVENTION: POLYEPITOPIC PROTEIN FRAGMENTS OF THE
TITLE OF INVENTION: PROTEINS OF HPV, THEIR PRODUCTION AND
TITLE OF INVENTION: PARTICULARLY IN VACCINATION
FILE REFERENCE: WOB1 AO INS
CURRENT APPLICATION NUMBER: US/09/980,523A
CURRENT FILING DATE: 2002-04-29
PRIOR APPLICATION NUMBER: PCT/FR00/01513
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PCT-US00-33549-31
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Best Local :
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APPLICANT:
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CURRENT FILING DATE: 2000-12-11
PRIOR APPLICATION NUMBER: US 60/172,705
PRIOR FILING DATE: 1999-12-10
PRIOR PPLICATION NUMBER: US 09/641,528
PRIOR APPLICATION NUMBER: US 09/641,528
PRIOR FILING DATE: 2000-08-15
NUMBER OF SEQ ID NOS: 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: Inducing Cellular Immune Responses to Human TITLE OF INVENTION: Papillomavirus Using Peptide and Nucleic Acid TITLE OF INVENTION: Compositions FILE REFERENCE: 018623-016110PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Sette, Alessandro
APPLICANT: Sidney, John
APPLICANT: Southwood, Scott
APPLICANT: Chesnut, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH:
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Grey, Howard M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
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99.3%;
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Pred. No. 7.3e-80;
0; Mismatches 1
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В
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; OTHER INFORMATION: Chimaeric protein (protein D from Haemoplilus; OTHER INFORMATION: influenza B and E6 from Human papilloma virus; OTHER INFORMATION: 16)
US-09-581-976-4
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LENGTH: 158
                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 4
LENGTH: 273
                                                                                                                                                                                      Matches
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Best Local :
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/581,976
CURRENT FILING DATE: 2000-06-20
PRIOR APPLICATION NUMBER: PCT/EP98/08563
PRIOR FILING DATE: 1998-12-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Dalemans, Wilfried L.J.
APPLICANT: Gerard, Catherine Marie Ghislaine
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45124
                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: GB
PRIOR FILING DATE: 1997-12-24
NUMBER OF SEQ ID NOS: 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 2000-05-31
PRIOR APPLICATION NUMBER: FR
PRIOR FILING DATE: 1999-06-03
NUMBER OF SEQ ID NOS: 24
                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
234
                               121
                                                                                                                       128
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                                                                                           61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
                                                                                                                                                                                     Local Similarity
les 150; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Match 99.18;
Local Similarity 99.38;
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                 KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
                                                                           AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKFLCDLLIRCINCQKFLCPEEKQRHLD 120
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                                                            AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
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                                                                                                                                                                                      Conservative
                                                                                                                                                                                                   99.1%;
99.3%;
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                                                                                                                                                                                   Score 843; DB 19;
Pred. No. 1.4e-79;
0; Mismatches 1;
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Pred. No. 7.3e-80;
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264
                                                                                                                                                                                                                  Length 273;
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                                                                                                                                                                                      Indels
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US-10-000-903-4

Sequence 4, Application US/10000903 GENERAL INFORMATION:

APPLICANT: Bruck, Claudine
APPLICANT: Cabezon Silva, Teresa
APPLICANT: Delisse, Anne-Marie Eva Fernande
APPLICANT: Gerard, Catherine Marie Ghislaine
APPLICANT: Lombardo-Bencheikh, Angela

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                                                                                                                                             ; ORGANISM: ChArtificial Sequence; FEATURE; OTHER INFORMATION: Chimaeric protein; OTHER INFORMATION: pneumoniae and E6; OTHER INFORMATION: 16)
US-09-581-976-10
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SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 10, Applica GENERAL INFORMATION:
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Best Local Similarity
                                                                      Query Match
Best Local Similarity
Matches 150; Conserv
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                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/581,976
CURRENT FILING DATE: 2000-06-20
PRIOR APPLICATION NUMBER: PCT/EP98/08563
PRIOR FILING DATE: 1998-12-18
PRIOR APPLICATION NUMBER: GB 9727262.9
PRIOR FILING DATE: 1997-12-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/10/000,903
CURRENT FILING DATE: 2001-10-01
PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Dalemans, Wilfried L.J.
APPLICANT: Gerard, Catherine Marie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: GB 9717953.5 PRIOR FILING DATE: 1997-08-22
                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Gerard, Catherine Marie Ghislaine TITLE OF INVENTION: Vaccine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Lombardo-Bencheikh, Angela TITLE OF INVENTION: Vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
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                                                                                                                                                                                                                                                              TYPE: PRT
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MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 192
                   MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 60
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                                                                    Score 843; DB 19;
Pred. No. 1.5e-79;
0; Mismatches 1;
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                                                                                                                                                                                 papilloma virus type
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                                                                        Indels
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                                                                                                                                                                                                                                                           Sequence 6, Application US/09581976
GENERAL INFORMATION:
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SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 10
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               SOFTWARE:
SEQ ID NO 6
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Best Local Similarity
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                                                                                                       CURRENT FILING DATE: 2000-06-20 PRIOR APPLICATION NUMBER: PCT/E PRIOR FILING DATE: 1998-12-18
                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/581,976
CURRENT FILING DATE: 2000-06-20
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CURRENT FILING DATE: 2001-10-01
                                                   NUMBER OF SEQ ID NOS:
                                                                   PRIOR APPLICATION NUMBER: GB 9727262.9 PRIOR FILING DATE: 1997-12-24
                                                                                                                                                                                       FILE REFERENCE:
                                                                                                                                                                                                       APPLICANT: Gerard, Catherine Marie Ghislaine TITLE OF INVENTION: Vaccine
                                                                                                                                                                                                                             APPLICANT: APPLICANT:
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TYPE: PRT
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LENGTH:
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371
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                                   FastSEQ for Windows Version 3.0
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                                                                                                                                                                                         B45124
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99.3%;
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ORGANISM: Artificial Sequence

TYPE: PRT

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RESULT 10
US-09-581-976-14
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US-09-581-976-6
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; TYPE: PRT
; ORGANISM: Homo sapien
US-10-000-903-6
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                                                                                         Sequence 14, Application US/09581976 GENERAL INFORMATION:
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Best Local Similarity
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Best Local :
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                         APPLICANT: Dalemans, Wilfried L.J.
APPLICANT: Gerard, Catherine Marie Ghislaine
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45124
CURRENT APPLICATION NUMBER: US/09/581,976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR FILING DATE: 1997-08-22
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CURRENT FILING DATE: 2001-10-01
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Delisse, Anne-Marie Eva Fernande
Gerard, Catherine Marie Ghislaine
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                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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99.3%;
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99.38;
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Pred. No. 2e-79;
0; Mismatches
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Pred. No. 2e-79;
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                                                                                                                                                                                                                                                                                                                                                                                                                  DB 24;
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US-10-000-903-14
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                                                                                                                                                     Query Match
Best Local Similarity
Matches 150; Conserv
                                                                                                                                                                                                                                                                                                              SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 14
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Best Local Similarity
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SEQ ID NO 14
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                                                                                                                                                                                                                                                  LENGTH: 390
TYPE: PRT
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/000,903
CURRENT FILING DATE: 2001-10-01
PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
PRIOR PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR FILING DATE: 1997-08-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Bruck, Claudine
APPLICANT: Cabezon Silva,
APPLICANT: Delisse, Anne-h
APPLICANT: Gerard, Catheri
APPLICANT: Lombardo-Benche
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE: B45107
                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: Vaccine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 390
TYPE: PRT
ORGANISM: Artificial
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                         133 MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 192
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                    61 AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
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Gerard, Catherine Marie Ghislaine
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                                                                                                                                                       Conservative
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Pred. No. 2.1e-79;
0; Mismatches 1;
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Pred. No. 2.1e-79;
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KKORFHNIRGRWTGRCMSCCRSSRTRRETQL

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RESULT 13
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; TYPE: PRT
; ORGANISM: Human papillomavirus
US-60-306-809-20
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GENERAL INFORMATION:
APPLICANT: Cassetti, Maria
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES
FILE REFERENCE: 0630/0M137-US0
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SEQ ID NO 13
LENCTH: 151
TYPE: PRT
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Best Local (
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Best Local Similarity
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CURRENT FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 14
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APPLICANT: FOLLEN, MICHELE
TITLE OF INVENTION: METHODS AND COMPOSITIONS RELATING TO HPV-ASSOCIATED
TITLE OF INVENTION: PRE-CANCEROUS AND CANCEROUS GROWTHS, INCLUDING CIN
FILE REFERENCE: UTSC::560USP1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/60/306,809
CURRENT FILING DATE: 2001-07-20
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                                  121 KKORFHNIRGRWTGRCMSCCRSSRTRRETQL 151
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                                                                                                                                                                                                                                         Local Similarity
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KKORFHNIRGRWTGRCMSCCRSSRTRRETQL 151
                                                                AVCDKCLKFYSKISEYRHYCYSVYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
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Pred. No. 1.4e-79;
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; LENGTH: 248
; TYPE: PRT
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SEQ ID NO 1
LENCTH: 248
TYPE: PRT
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GENERAL INFORMATION:
APPLICANT: Cassetti, Maria
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1, Application US/60415929 GENERAL INFORMATION:
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Best Local Similarity 98.7%;
Matches 148; Conservative
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Best Local Similarity
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CURRENT APPLICATION NUMBER: 06360/415,929
CURRENT FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 14
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CURRENT APPLICATION NUMBER: US/60/415,929
CURRENT FILING DATE: 2002-10-03
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SOFTWARE: PatentIn version 3.1
219
                 122 KQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
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                                                                     VCDKCLKFYSKISEYRHYCYSVYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLDK
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KQRFHNIRGRWTGRCMSCCRSSRTRRETQL
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98.7%;
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Pred. No. 2.6e-79;
1; Mismatches 1;
                                                                                                                                                                                                                   Score 835; DB 27;
Pred. No. 8.7e-79;
1; Mismatches 1;
248
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Search completed: December 13, Job time: 253.902 secs

2002, 08:44:50

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Result
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Maximum Match 100%
Listing first 45 summaries
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39
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Copyright (c) 1993 - 2002
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sp_bacteria:*
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sp_rvirus:*
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 5 Q97EE3
Q9XVW9
6 Q9KLJ2
7 Q9YFK5
7 Q9BYFK
7 Q12157
6 Q9KVL1
1 Q9D1Y0
1 Q9D1Y0
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Q9UWQ9
Q9XTT3
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Q5900C2
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Compugen Ltd.
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O9frj9 oryza sativ
O59667 pyrococcus
O9v0c2 pyrococcus
O8u2e5 pyrococcus
O9uwq9 thermococcu
O9xt13 caenorhabdi
O97ee3 clostridium
O9xvw9 caenorhabdi
O9yfk5 aeropyrum p
O9bim1 giardia lam
O12157 saccharomyc
O9kv11 vibrio chol
O9yfk5 aeropyrum p
O9bim1 giardia lam
O12157 saccharomyc
O9kv11 vibrio chol
O9lu16 arabidopsis
O9fhg8 arabidopsis
O9fhg8 arabidopsis
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5	Q9NWA5	4	452		30	45
	Q9LN71	10	408	٠	30	44
G	Q9C965	10	407	٠	30	43
	Q9LR95	10	406	76.9	30	42
G	Q93Z65	10	381		30	41
	Q9CAM6	10	381		30	40
	Q93YQ5	10	379	•	30	39
	Q9FL07	10	376		30	38
	Q9M2E6	10	362	•	30	37
Q9xj08 oryza sativ	80FX60	10	356		30	36
027796 methanobac	027796	17	352		30	35
	Q9SU66	10	349	•	30	34
O50099 pyrococcus	050099	17	348	•	30	ü
	Q9D6H5	11	343	•	30	32
Q9c9x1 arabidopsis	Q9C9X1	10	343		30	31
027446 methanobact	027446	17	335	76.9	30	30
S	Q9P7F8	ω	329		30	29
æ	Q97CU8	17	306		30	28
	Q9нм25	17	306		30	27
	Q97YV0	17	300		30	26
	Q970R9	17	300		30	25
5 mela	Q9YW65	12	297		30	24
homo	Q9NWT3	4	258	•	30	23
homo	015262	4	247		30	22
	Q91MM4	12	240	•	30	21
-	Q8UYC4	12	238	5	30	20
	Q8UZN7	12	238		30	9
Q8s2k2 oryza sativ	Q8S2K2	10	238	σ.	30	8
Q9cyul mus musculu	Q9CYU1	11	232	76.9	30	۱7

ALIGNMENTS

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RESULT 1
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                                                                                                                                                           Matches
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EMBL; AC073166; AAG46117.1; -.
InterPro: IPR001841; Znf_ring.
Pfam; PF00097; zf-C3HC4; 1.
SMART; SM00184; RING; 1.
Zinc-finger.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.

STRAIN-CV. NIPPONBARE;

Buell C.R., Yuan Q., Moffat K.S., Hill J.N., Burr P.C., Hsiao J.,

Zismann V., Pai G., Bowman C.L., Fujii C.Y., Vanaken S.E.,

Zismann C.L., Craven B., Utterback T.R., Khalak H., Feldblyum T.V.,

Dowman C.L., Craven B., Utterback T.R., Khalak H., Feldblyum T.V.,

Quackenbush J., White O., Salzberg S.L., Fraser C.M.;

"Oryza sativa chromosome 10 BAC OSUNBb0064P21 genomic sequence.";

Submitted (AUG-2001) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Oryza sativa (Rice).
Oryza sativa (Rice).
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Enermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              O9FRJ9 PRELIMINARY; PRT; 255 AA.
O9FRJ9;
01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Spermatophyta; Magnoliophyta;
Ehrhartoideae; Oryzeae; Oryza;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Putative ring finger protein. OSJNBB0064P21.7.
                                                                                                                                                                                                                                                                                                                   SEQUENCE
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193 NSSCPSC 199
                                                                                                                                                                                                Local
                                                                         4 NXXCPXC 10
                                                                                                                                                                                                Similarity
                                                                                                                                                       4.
                                                                                                                                                                                                                                                                                                           255 AA;
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                                                                                                                                                                                                79.5%;
57.1%;
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                                                                                                                                                           Mismatches
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. No. 1.4e+02;
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RESULT
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01-MAY-2000
01-MAR-2002
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Q59667;
                                                                                                                                                                                                             "Pyrococcus abyssi genome sequence: insights is structure and evolution.";
Submitted (JUL-1999) to the EMBL/GenBank/DDBJ EMBL; AJ248285; CAB49782.1;
InterPro; IPR001450; 4Fe4S_ferredoxin.
PROSITE; PS00198; 4Fe4S_FERREDOXIN; 2.
                                                                                                                                                                            Complete proteome. SEQUENCE 367 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hydrogenase PAB1784.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Microbiology 141:449-458(1995).
EMBL; X75255; CAA53034.1; -.
InterPro; IPR001450; 4Fe4S_ferredoxin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Characterization of the locus encoding from the archaeon Pyrococcus furiosus: 6 bacterial sulfite reductases.";
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MEDLINE-95219100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pyrococcus.
NCBI_TaxID=2261;
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                                                                                                                                                                                                                                                                                                                                                              STRAIN-ORSAY;
                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Archaea; Euryarchaeota;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pyrococcus abyssi.
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                                                                                                                                                                                                                                                                                                                                           Heilig R.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (TrEMBLrel. 13, Created)
(TrEMBLrel. 13, Last sequence
(TrEMBLrel. 20, Last annotati
(EC 1.12.2.1) (Cytochrome-C3
                                                                                                Conservative
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Volpe A., Galli G.,
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4FE4S_FERREDOXIN;
                                                                                                                                                                               43230 MW;
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57.1%;
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57.1%;
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Last sequence upolast annotation upolast annotation upolastical (EC 1.12.2.1).
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Last annotation update)
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                                                                                                                   Score 31;
Pred. No.
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Rakhely G., Zhou Z.Z., Adams M.W.W., Kovacs K.L.;
Richem Called Characterization of the [NiFe] hydrogenase from the hyperthermophilic archaeon, Thermococcus litoralis.";
EUI. J. Biochem. 266:1158-1165(1999).
EMBL; AF039208; AAB94933.1; -.
InterPro; IPR001450; 4Fe4S_ferredoxin.
Pfam; PF00037, fer4; 1.
PROSITE; PS00198; 4Fe4S_FERREDOXIN; 2.
SEQUENCE 369 AA; 43293 MW; 42332FFB7D749973 CRC64;
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SEQUENCE 367 AA; 43398 MW; 8329F3842CBC48D0 CRC64:
    Q9XTT3
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01-MAY-2000 (TrEMBLrel.
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01-JUN-2002 (TrEMBLrel.
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Last annotation updat
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                                                                                                                                                SEQUENCE FROM N.A.

STRAIN-ATCC 824 / DSM 792 / VKM B-1787;

X MEDLINE-21359325; PubMed-11466286;

X Noelling J. Breton G., Omelchenko M.V., Makarova K.S.

A Gibson R., Lee H.M., Dubois J., Qiu D., Hitti J., Wol

Tatusov R.L., Sabathe F., Doucette-Stamm L., Soucaill

Bennett G.N., Koonin E.V., Smith D.R.;

"Genome sequence and comparative analysis of the solv

Dacterium Clostridium acetobutylicum.";

J. Bacteriol. 183:4832-4838(2001).

EMBL; AE007812; AAK81107.1;

InterPro; IPR004404; IIVD.

BI InterPro; IPR004404; IIVD.

IN InterPro; IPR000581; ILVD_EDD_family.

Pfam; PF00920; ILVD_EDD_family; 1.

TIGRFAMS; TIGR00110; IIVD_EDD_family; 1.

TIGRFAMS; TIGR00110; IIVD_EDD_family; 1.
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01-NOV-1999 (TrEMBLrel.:
01-DEC-2001 (TrEMBLrel.:
01-JUN 2002 (TrEMBLrel.:
Y49E10.20 protein.
Y49E10.20.
                                                                                              PROSITE;
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Bacteria; Firmicutes; Bacillus/Clostridium group;
Clostridiales; Clostridiaceae; Clostridium.
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Eukaryota; Metazoa; Nematoda;
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Science 282:2012-2018(1998).
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552 AA;
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01-OCT-2000
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science 282:2012-2018(1998).
EMBL; Z54238; CAA90999.2;
EMBL; MAR 13204 MW;
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T28C6.8.
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STRAIN-EL TOR N16561 / SEROTYPE 01;

MEDLINE-20406833; PubMed=10952301;

Heidelberg J.F., Eisen J.A., Nelson W.C., Clayton R.A., Gwinn M.L.,

Dodson R.J., Haft D.H., Hickey E.K., Peterson J.D., Umayam L.A.,

Gill S.R., Nelson K.E., Read T.D., Tettelin H., Alchardson D.,

Ermolaeva M.D., Vamathevan J., Bass S., Qin H., Dragoi I., Sellers P.,

McDonald L., Utterback T., Fleischmann R.D., Nierman W.C., White O.,

Salzberg S.L., Smith H.O., Colwell R.R., Mekalanos J.J., Venter J.C.,

Fraser C.M.;
                                                            EMBL;
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Rhabditidae; Peloderinae; Cae
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01-MAR-2001 (TrEMBLrel.
01-MAR-2001 (TrEMBLrel.
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                                                                                                                                                         "DNA sequence of both chromosomes cholerae.";
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                                                                                                                           Nature 406:477-483(2000)
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Pred. No. 1.3e
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Complete proteome.
SEQUENCE 144 AA; 15
SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
MEDLINE-21391783; PubMed-11500396;
MEDLINE-21391783; PubMed-11500396;
MEDLINE-21391783; PubMed-11500396;
MITTHER P., Muller N.
Pispen Wilson by Giardia lamblia Clone G
Antigenic Variation In Vivo and In Vitro.";
Treact. Immun. 69:5278-5285(2001).
                                                                                                                                                                                                                                                                                                                             Q9BIM1;
Q9BIM1;
                                                                                                                                                                                           01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence up
01-JUN-2002 (TrEMBLrel. 21, Last sequence)
Variable surface protein 7b (Fragment).
Giardia lamblia (Giardia intestinalis).
Eukaryota; Diplomonadida; Hexamitidae; Giard
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Kawarabayasi Y., Hino Y., Horikawa H., Yamazaki S., Haikawa Jin-no K., Takahashi M., Sekine M., Baba S.-I., Ankai A., Ku Hosoyama A., Fukui S., Nagai Y., Nishijima K., Nakazawa Takamiya M., Masuda S., Funahashi T., Tanaka T., Kudoh Y., Yamazaki J., Kushida N., Oguchi A., Aoki K.-I., Kubota K., Nakamura Y., Nomura N., Sako Y., Kikuchi H.;
"Complete genome sequence of an aerobic hyper-thermophilic crenarchaeon, Aeropyrum pernix KI.";
DNA Res. 6:83-101(1999).
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NCBI_TaxID=56636;
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InterPro; IPR000063; Thiored.
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(TrEMBLrel.)
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16500 MW; 263AEBD89E893D7F
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Last sequence up
Last annotation
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Pred. No. 1.5e
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Pred. No. 1.5e+02;
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Matches 4
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Best Local S
Matches 4
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01-NOV-1996 (TrEMBLrel. 01, Last sequence u)
01-JUN-2002 (TrEMBLrel. 21, Last annotation
Chromosome IV reading frame Orar VDL008W.
APC11 OR D2900 OR YDL008W.
Saccharomyces cerevisiae (Baker's yeast).
Eukaryota; Fungi; Ascomycota; Saccharomycot.
Saccharomycetales; Saccharomycetaceae; Saccl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Andre B., Vissers S., Urrestaraz
Submitted (FEB-1995) to the EMBL
EMBL; Z74056; CAA98564.1; -.
EMBL; Z48432; CAA88351.1; -.
SGD; S0002166; APC11.
InterPro; IPR001841; Znf_ring.
                                                                                                                                 01-OCT-2000
01-OCT-2000
01-MAR-2002
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Q12157;
                                                                        Vibrio cholerae
                                                                                               Hypothetical
VC0131..
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                                                                                                                                                                                              Q9KVL1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hypothetical protein SEQUENCE 165 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A. Urrestarazu L.A.,
SEQUENCE FROM N.A
                                  NCBI_TaxID=666;
                                                          Bacteria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SMART; SM00184; RING;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN-ALPHA S288C;
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4; Conserv
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(JUL-1996) to
                                                        Proteobacteria;
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                                                                                                                                                                                                                PRELIMINARY;
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Pred. No. 1.5e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                        Score 30; DB 3; Lo
Pred. No. 1.6e+02;
0; Mismatches 3;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99F8E8C6BC841934 CRC64;
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01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Similarity to RING-H2 zinc finger protein ATL3.
Arabidopsis thaliana (Mouse-ear cress).
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosida eurosids II; Brassicales; Brassicaceae.
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01-OCT-2000 (TrEMBLrel.
01-OCT-2000 (TrEMBLrel.
01-DEC-2001 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                 Clones."; 7:131-135(2000).
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                                                                                                                                                                                                                                                                               -i- SIMILARITY: CONTAINS 1 RING-TYPE EMBL; AB022220; BAB01038.1; -. InterPro; IPR001841; Znf ring. Pfam; PF00097; zf-C3HC4; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              InterPro; IPR000152; Asx_hydroxyl.
PROSITE; PS00010; ASX_HYDROXYL; UNKNOWN_1.
Hypothetical protein; Complete proteome.
SEQUENCE 198 AA; 22841 MW; C139FCAAZE26F3A7 CRC64;
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TIGR; VC0131; -
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                                                                                                                                                                                                                                 Zinc-finger
                                                                                                                                                                                                                                                          SMART; SM00184; RING; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=20277480; PubMed=10819329;
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EMBL; AE004103; AAF93308.1;
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RESULT 15

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Search completed: December 13, Job time: 6.82822 secs
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Q1-MAR-2001 (TrEMBLrel. 16, Created)
Q1-MAR-2001 (TrEMBLrel. 16, Last sequence update)
Q1-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Similarity to C3HC4-type RING zinc finger protein.
Arabidopsis thaliana (Mouse-ear cress).
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosida eurosids II; Brassicales; Brassicaceae; Arabidopsis.
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Miyajina N., Tabata S.;
Miyajina N., Tabata S.;
"Structural analysis of Arabidopsis thaliana chromosome
Sequence features of the regions of 1,011,550 bp covered
Pl and TAC clones.";
DNA Res. 6:183-195(1999).
-!- SIMILARITY: CONTAINS 1 RING-TYPE ZINC FINGER.
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Query Match Best Local S Matches 4

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RESULT 2

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T "Genome sequence and comparative analysis of the solvent-pr pacterium Clostridium acetobutylicum.";

L J Bacteriol. 183:4823-4838(2001).

C -!- CATALYTIC ACTIVITY: 2,3-dihydroxy-3-methylbutanoate = 3 oxobutanoate + H(2)o.

C -!- COPACTOR: Binds 1 4Fe-4S cluster (Potential).

C -!- PATHWAY: Valine and isoleucine biosynthesis; fourth ste
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InterPro; IPR000581; ILVD_EDD_family.
Pfam; PF00920; ILVD_EDD; 1.
ProDom; PD002691; ILVD_EDD_family; 1.
TIGREAMS; TIGR00110; ilvD; 1.
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NCBI_TaxID=585
                 Proteus
                          Bacteria; Proteobacteria;
                                          Proteus vulgaris
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MEDLINE-21359325; PubMed-11466286;
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SEQUENCE
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MEDLINE=8419544; PubMed=6546793;
MCDLINE=B.J.C., Janssen H., Zuidema D.,
"Complete nucleotide sequence of tobacco str
"Complete Acids Res. 12:2427-2437(1984).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Nucleotide sequence and comparative analysis of the frd operor encoding the fumarate reductase of Proteus vulgaris. Extensive sequence divergence of the membrane anchors and absence of an frd-linked ampC cephalosporinase gene.";

Eur. J. Biochem. 167:481-488(1987).
                     modified and this statement is not removed entities requires a license agreement (See or send an email to license@isb-sib.ch).
                                                          This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way
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                                                                                                                                                                                                                                Viruses; ssRNA positive-strand viruses,
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SEQUENCE FROM
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streak virus
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STRAIN-ATCC 15692 / PAO1;

MEDIJINE-91100333; PubMed=1898929;

MEDIJINE-911100333; PubMed=A., Lazdunski A.;

"Protein secretion in Pseudomonas aeruginosa:

an integral inner membrane protein homologous

pneumoniae secretion function protein PulO.";

J. Bacteriol. 173:479-486(1991).
                                                                                                                                                                                                                                                                                                                                         MEDLINE=20437337; PubMed=10984043; Stover C.K., Pham X.-Q.T., Erwin A.L., Mizoguchi S.D., Warrener P., Hickey M.J., Brinkman F.S.L., Hufnagle W.O., Kowalik D.J., Lagrou M. Garber R.L., Goltry L., Tolentino E., Westbrock-Wadman S., Yuan Y., Brody L.L., Coulter S.N., Folger K.R., Kas A., Larbig K., Lim R.M., Smith K.A., Spencer D.H., Wong G.K.-S., Wu Z., Paulsen I.T., Reizer J., Saler M.H., Hancock R.E.W., Lory S., Olson M.V.; "Complete genome sequence of Pseudomonas aeruginosa PAO1, an opportunistic pathogen";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16-OCT-2001 (Rel. 40, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Type 4 prepilin-like proteins leader peptide processing enzyme
(Protein secretion protein XCPA) (PILD protein) [Includes: Leader
peptidase (EC 3.4.99.-) (Prepilin peptidase); N-methyltransferase
(EC 2.1.1.-)]
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nunn D., Bergman S., Lory S.;
"Products of three accessory genes, pilB, pilC, and pilD, required for biogenesis of Pseudomonas aeruginosa pili.";
J. Bacteriol. 172:2911-2919(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-AUG-1991
16-OCT-2001
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MEDLINE=94335721; PubMed=8057924; Strom M.S., Nunn D.N., Lory S.; "Posttranslational processing of of Pseudomonas aeruginosa.";
                                                                                                                                                           Lory S., Strom M.S.;
"Structure-function relationship of type-IV
Pseudomonas aeruginosa -- a review.";
                                                                                                                                                                                                                                                                                                  Nature 406:959-964(2000).
[4]
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Gene 192:117-121(1997).
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Klebsiella
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YDRD_SCHPO 013747; 15-JUL-1998 15-JUL-1998 15-JUN-2002

(Rel. (Rel. (Rel.

36, 36, 41,

Created)
Last sequence up

update)

STANDARD;

547

A

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RESULT
YDRD_S
                                                                                                                                    Q
                                            В
                                                                                        Matches
                                                                                                   Query Match
Best Local
                                                                                                                                                                             TRANSMEM
ACT_SITE
ACT_SITE
                                                                                                                                                                                                               TRANSMEM
TRANSMEM
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Amino acid substitutions in PilD, a bifunctional enzyme or Pseudomonas aeruginosa. Effect on leader peptidase and N-methyltransferase activities in vitro and in vivo.";

J. Biol. Chem. 273:19120-19129(1998).

-i- FUNCTION: CLEAVES TYPE-4 FIMBRIAL LEADER SEQUENCE AND THE N-TERMINAL (GENERALLY PHE) RESIDUE. PROCESSES THE PRECURSOR DURING MEMBRANE TRANSLOCATION. REQUIRED FOR DOTTENS.
                                                                                                                                                                                                                                                                                                                                                      PIR;
PIR;
                                                                                                                                                                                                                                                                                                                                                                           EMBL;
EMBL;
 SCHPO
                                                                                                                                              ACT_SITE VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                    use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=98334648;
Pepe J.C., Lory S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Identification of active-site cysteines in the conserved domain of PilD, the bifunctional type IV pilin leader peptidase/N-methyltransferase of Pseudomonas aeruginosa.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Meth.
[6]
                                                                                                                                                                                                                                                                                                        Pfam; PF01478; Poprints; PR00864;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the European Bioinformatics Institute.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Strom M.S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MUTAGENESIS OF CYSTEINE RESIDUES. MEDLINE=93340186; PubMed=8340405;
                                                                                                                                                                                                                                                  TRANSMEM
                                                                                                                                                                                                                                                                        TRANSMEM
                                                                                                                                                                                                                                                                                            Multifunctional enzyme; Hydrolase; Protease; Transferase;
                                                                                                                                                                                                                                                                                                                                InterPro;
                                                                                                                                                                                                                                                                                                                                          MEROPS; A24.001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                between
                                                                                                                                                                                                                                                                                  Methyltransferase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MUTAGENESIS OF
                                                                                                                                                                                                                                                               DOMAIN
                                              69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Biol. Chem.
                                                                  4 NXXCPXC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUBCELLULAR LOCATION: Integral membrane protein. Inner SIMILARITY: BELONGS TO PEPTIDASE FAMILY A24.
                                                                                                                                                                                                                                                                                                                                                     C35384; C35384.
A39131; A39131.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SWISS-PROT entry is copyright. It is produced een the Swiss Institute of Bioinformatics and
                                            NSACPRC
                                                                                                                                                                                                                                                                                                                                                                         M32066; AAA25734.1; -. M61096; AAA26023.1; -. AE004867; AAG07916.1; -.
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                                                                                        4:
                                                                                                   Similarity
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34
128
158
163
228
261
72
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75
                                                                                        Conservative
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127
148
178
203
224
276
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100
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                                                                                                                                                                                                                                                                                                         PREPILNPTASE
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PubMed=9668097;
                                                                                                                                                                                                                                                                                    Transmembrane;
                                                                                                   76.9%;
57.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lory S.;
                                                                                                                                     MW.
                                                                                                                                            IMPORTANT FOR ACTIVITY.
T -> A (IN STRAIN PAK).
                                                                                        0;
                                                                                                   Score 30;
Pred. No.
                                                                                                                                                                                                    POTENTIAL.
POTENTIAL.
POTENTIAL.
POTENTIAL.
                                                                                                                                                                                                                                                            CYTOPLASMIC
                                                                                                                                                                                                                                                  POTENTIAL
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                                                                                                                                    57A8526EB18FB752
                                                                                        Mismatches
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                                                                                                    DB
87;
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                                                                                                                                                                                                                                                            (POTENTIAL)
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                                                                                                            Length 290
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                                                                                                                                    CRC64;
                                                                                        Indels
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PILIN
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                                                                                        Gaps
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Hypothetical RING finger protein C16E8.13 in

chromosome

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RESULT 7
RN12_MOUSE
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RA Sgouros J., Peat N., Hayles J., Baker S., Basham D., Bowman S.,
RA Brooks K., Brown D., Brown S., Chillingworth T., Churcher C.M.,
RA Brooks K., Brown D., Brown S., Chillingworth T., Churcher C.M.,
RA Gollins M., Connor R., Cronin A., Davis P., Feltwell T., Fraser A.,
RA Holicoyd S., Hornsby T., Howarth S., Huckle E.J., Hunt S., Jagels K.,
Almes K., Jones M., Leather S., McDean J.,
RA Holicoyd S., Hornsby T., Howarth S., Huckle E.J., Millett D., Odell C.,
RA Holicoyd S., Hornsby T., Howarth S., Huckle E.J., McLean J.,
RA Holicoyd S., Hornsby T., Howarth S., Huckle E.J., Hunt S., Jagels K.,
Almes K., Jones M., Leather S., McDean J.,
RA Holicoyd S., Hornsby T., Howarth S., Huckle E.J., McLean J.,
RA Holicoyd S., Hornsby T., Howarth S., Huckle E.J., Hunt S., Jagels K.,
RA Holicoyd S., Hornsby T., Howarth S., Huckle E.J., Holer S., McLean J.,
RA Holicoyd S., Hornsby T., Howarth S., Huckle E.J., McLean J.,
RA Holicoyd S., Hornsby T., Hamlin N., Harris D., Hilbert D., Odell C.,
RA Woodward J., Volckaert S., Saunders D., Seeger K., Sharp S.,
RA Woodward J., Volckaert G., Aert R., Robben J., Grymonprez B.,
RA Woodward J., Volckaert G., Aert R., Robben J., Grymonprez B.,
RA Woodward J., Volckaert G., Aert R., Robben J., Hilbert H.,
RA Borzym K., Langer I., Beck A., Lehrach H., Reinhardt R., Pohl T.M.,
RA Borzym K., Langer I., Beck A., Lehrach H., Reinhardt R., Pohl T.M.,
RA Borzym K., Langer I., Beck A., Lehrach H., Reinhardt R., Pohl T.M.,
RA Borzym K., Langer I., Beck A., Lehrach H., Reinhardt R., Pohl T.M.,
RA Gilbert F., Aves S.J., Xiang Z., Hunt C., Moore K., Hurst S.M.,
RA Gilbert F., Aves S.J., Xiang Z., Hunt C., Moore K., Hurst S.M.,
RA Gilbert F., Aves S.J., Xiang Z., Hunt C., Moore K., Hurst S.M.,
RA Gilbert F., Deck A., Genzon S., Armstrong J., Forsburg S.L.,
RA Galibert F., McComble W.R., Pallsen I., Potashkin J.,
RA Grand R.R., Cuzado L., Jimenez J., Sanchez M., Gel Rey F., Benito J.,
RA Galibert F., Well H., Weller F., Benito J.,
RA 
                                                                                                                                                                                                                                                                                                                                                InterPro; IPR001607; Znf_UBP.
InterPro; IPR001841; Znf_ring.
Pfam; PF00097; zf-C3HC4; 1.
Pfam; PF02148; zf-UBP; 1.
SMARR; SM00184; RING; 1.
SMARR; SM00290; ZnF_UBP; 1.
SMART; SM00290; ZnF_UBP; 1.
PROSITE; PS00518; ZF_RING_1; FALSE_NEG.
PROSITE; PS0089; ZF_RING_2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Schizosaccharomycetales; Schizosaccharomyces.
                                                                                                                                                                                                                                                                                                                                  Hypothetical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; Z98529; CAB11041.1; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=21848401; PubMed=11859360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Fungi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Schizosaccharomyces
                                                                                          241
                                                                                                                                   4
                                                                                          NSSCPVC
                                                                                                                                   NXXCPXC
                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                   208
526
547 I
                                                                                                                                                                             Conservative
                                                                                          247
                                                                                                                                   10
                                                                                                                                                                                                                                                                                                                                  protein;
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                                                                                                                                                                                                                                                                 248 I
534 I
61825 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          pombe (Fission yeast).
scomycota; Schizosaccharomycetes;
ales; Schizosaccharomycetaceae;
                                                                                                                                                                                               76.9%;
57.1%;
                                                                                                                                                                                                                                                                                                                                  Zinc-finger
                                                                                                                                                                             0,
                                                                                                                                                                             Score 30; DB 1;
Pred. No. 1.3e+02;
0; Mismatches
                                                                                                                                                                                                                                                               RING-TYPE.
POLY-LYS.
; 2C3FDB4FD7CF70E1 CRC64;
                                                                                                                                                                                                                  Length 547
                                                                                                                                                                           0,
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                                                                                                                        RESULT
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                                                                                                                                                                                                                                     Query Match
Best Local
                        EXO2_BPT5 STANDARD; PR
P11109;
01-JUL-1989 (Rel. 11, Created)
01-JUL-1989 (Rel. 11, Last seque)
16-OCT-2001 (Rel. 40, Last annot)
Probable exonuclease subunit 2 (
                                                                                                             _BPT5
                                                                                                                                                                                                                                                                             DOMAIN
SEQUENCE
                                                                                                                                                                                                                                                                                                       DOMAIN
ZN_FING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This SWI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
16-OCT-2001 (Rel. 40, Last annotation update)
RING finger protein 12 (LIM domain interacting RII
(RING finger LIM domain-binding protein) (R-LIM).
RNF12 OR RLIM.
                                                                                                                                                                                                                                                                                                                                 PROSITE; PS00518; ZF_RING_1; FALSE_NEG PROSITE; PS50089; ZF_RING_2; 1.
Transcription regulation; Zinc-finger.
                                                                                                                                                                                                                                                                                                                                                                                        MGD; MGI:1342291; Rnf12.
InterPro; IPR001841; Znf_ring.
Pfam; PF00097; zf-C3HC4; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           entities requires a license agreement (S or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       the European Bioinformatics Institute. There are no rest
use by non-profit institutions as long as its content
modified and this statement is not removed. Usage by ar
entities requires a license agreement (See http://www.isb-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    factors via recruitment of the histone deacetyl Nat. Genet. 22:394-399(1999).

-i- FUNCTION: ACTS AS A NEGATIVE CO-REGULATOR E TRANSCRIPTION FACTORS. VIA THE RECRUITMENT DEACETYLASE COREPESSOR COMPLEX.

-i- SUBUNIT: ASSOCIATES WITH LIM/HOMEOBOX FACTORS.

-i- SIMILARITY: CONTAINS 1 RING-TYPE ZINC FINGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE-99364422; PubMed-10431247;
Bach I., Rodriguez-Esteban C., Carriere C.,
Rose D.W., Glass C.K., Andersen B., Izpisua
Rosenfeld M.G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              coregulators of LIM homeodomain factors."; submitted (JUN-1998) to the EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bach I
Bacteriophage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "RLIM inhibits functional activity of I factors via recruitment of the histone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FUNCTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Opposing developmental functions of positive coregulators of LIM homeodomain factors.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29WTV7;
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                                                                                                                                                                   580
                                                                                                                                                                                             4 NXXCPXC
                                                                                                                                                                   NSTCPIC
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                                                                                                                                                                                                                                                                                                                                                                                                                                 AF069992; AAD34209.1;
                                                                                                                                                                                                                                                                                                                                                                            SM00184; RING;
                                                                                                                                                                                                                        Similarity 4; Conserv
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                                                                                                                                                                                                                                                                             447
600 i
                                                                                                                                                                                                                          Conservative
                                                                                                                                                                   586
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                         11, Last sequence update)
40, Last annotation update)
ase subunit 2 (EC 3.1.11.-)
                                                                                                                                                                                                                                                                             461
66470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chordata;
Rodentia;
                                                                                                                                                                                                                                    76.9%;
57.1%;
                                                                                                                                                                                                                                                                               ME:
                                                                                                                                                                                                                       Score 30; DB 1; Pred. No. 1.4e+02; Score 3;
                                                                                                                                                                                                                                                                            SER-RICH.
RING-TYPE.
POLY-SER.
; E68299530126E41D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
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                            (D13).
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                                                                                                                                                                                                                                                  Length 600
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      complex.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  he EMBL outsi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HOMEODOMAIN
SIN3A/HISTONE
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is
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RESULT 9
RN12_HUMAN
ID RN12_H
AC Q9NVW2
DT 16-OCT
DT 16-OCT
DT 15-JUN
DE RING
COMMAN
C
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q9NVW2; Q9Y598;
16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
RING finger protein 12 (LIM domain interacting RING finger protein)
(RING finger LIM domain-binding protein) (R-LIM) (NY-REN-43 antigen).
RNF12 OR RLIM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Early protein.
NP_BIND 35
SEQUENCE 612 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 use by non-profit institutions as long a modified and this statement is not removed. entitles requires a license agreement (See lor send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as lits content is in no way the support of the support 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NTP-binding sequence motif and probably involved in DNA recombination and repair.";
FEBS Lett. 252:47-52(1989).
-!- FUNCTION: POSSIBLE EXONUCLEASE INVOLVED IN PHAGE DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       genes D10-D15.";
Nucleic Acids Res. 16:10353-10354(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDI:INE=89057468; PubMed=3057441;
Kaliman A.V., Kryukov V.M., Bayer A.A.;
"The nucleotide sequence of the region
         Genomics [2]
                                                      SEQUENCE FROM N.A.

MEDLINE=20469411; PubMed=11013082;

Ostendorff H.P., Bossenz M., Mincheva A., Copeland N.G.,

Jenkins N.A., Lichter P., Bach I.;

"Functional characterization of the gene encoding RLIM,

corepressor of LIM homeodomain transcription factors.";

Genomics 69:120-130(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Blinov V.M., Koonin E.V., Gorbalenya A.E., Kaliman A.V., Kryukov Two early genes of bacteriophage T5 encode proteins containing a NTP-binding sequence motif and probably involved in DNA replications.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Viruses; dsDNA viruses, no T5-like viruses.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (Human)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               POSSIBLE FUNCTION.
                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=9606
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           X12930; CAA31400.1; X12930; CAA31401.1; A; A; A; CAA04586.1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chordata;
Primates;
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68673
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57.18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABC_transportr
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Pred. No. 1
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; 92E27B652D1DE141 CRC64;
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Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Vertebrata;
i; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.4e+02;
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                                                                                                                                                                                                                                           Gilbert
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ASM_MOUSE ID ASM_M AC Q0451 DT 01-OC DT 01-FE

ASM_MOUSE Q04519; Q1-OCT-1993 Q1-FEB-1996

(Rel.

27, Created)
33, Last sequence

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STANDARD;

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ISOGAI T., Ota T., Hayashi K., Sugiyama T., Otsuki T., Suzuki I.,
Nishikawa T., Nagai K., Sugano S., Shiratori A., Sudo H.,
Nishikawa T., Nagai K., Sugano S., Shiratori A., Kondo H.,
Sugawara M.,
Wagatsuma M., Hosoiri T., Kaku Y., Kodaira H., Kondo H., Sugawara M.
Takahashi M., Chiba Y., Ishida S., Murakawa K., Ono Y., Takiguchi S.
Watanabe S., Kimura K., Murakami K., Ishii S., Kawai Y., Saito K.,
Yamamoto J., Wakamatsu A., Nakamura Y., Nagahari K., Masuho Y.,
Ninomiya K., Iwayanagi T.;
"NEDO human cDNA sequencing project.";
Submitted (FEB-2000) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: ACTS AS A NEGATIVE CO-REGULATOR FOR LIM HOMEODOMAIN
-!- FUNCTION FACTORS. VIA THE RECRUITMENT OF THE SIN3A/HISTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Scanlan M.J., G
Jongeneel V., G
Old L.J.;
                                                                                                                     CONFLICT
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                                                                                                                                                                                                                                                                                                                                                                                                                   This SWISS-PROT entry is copyright. It is produced through a clear the Swiss Institute of Bioinformatics and the EMBL the European Bioinformatics Institute. There are no restrict use by non-profit institutions as long as its content is modified and this statement is not removed. Usage by and the statement is not removed.
                                                                                                                                                                                                                                                                                                                                       EMBL; AJ271670; CAC14228.1; -
EMBL; AF155109; AAD42875.1; AI
EMBL; AK001334; BAA91632.1; -
                                                                                                                                                                                                                                                                                                                                                                                          entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -i- SUBUNIT: ASSOCIATES WITH LIM/HOMEOBOX FACTORS.
-i- TISSUE SPECIFICITY: EXPRESSED IN MANY TISSUES.
-i- SIMILARITY: CONTAINS 1 RING-TYPE ZINC FINGER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE=Renal cell carcinoma:
MEDLINE=99438124; PubMed=10508479;
Scanlan M.J. Gordan J.D., Williamson B.,
Jongeneel V., Gure A.O., Jager D., Jager
                                                                                                        SEQUENCE
                                                                                                                                                                                                                                           PROSITE; PS00518; ZF_RING_1; PROSITE; PS50089; ZF_RING_2;
                                                                                                                                                                                                                                                                        SMART;
                                                                                                                                                                                                                                                                                       Ptam;
                                                                                                                                                                                                                                                                                                                 MIM:
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                                                                                                                                                                                                                               Transcription
                                                                                                                                                                                                                                                                                                  InterPro; IPR001841;
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                                                                                                                                                                            DOMAIN
604
                          4 NXXCPXC
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                                                                                                                                      300379;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  J. Cancer
                                                                                                                                                                                                                                                                                   Pro; IPR001841; Znf_ring.
PF00097; zf-C3HC4; 1.
NSTCPIC
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                                                                Similarity
                                                                                                        624 AA;
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POLY-SER.
S -> C (IN REF. 1).
N -> D (IN REF. 3).
YS -> NR (IN REF. 3).
Y -> H (IN REF. 3).
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0; Mismatches
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E., Knuth
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Chen Y.-T.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-JUN-2002 (Rel. 41, Last annotation update) Sphingomyelin phosphodiesterase precursor (EC 3.1.4.12) (Acid sphingomyelinase) (aSMase).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This
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Mammalia; Eutheria;
NCBI_TaxID=10090;
                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                               CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN-BALB/C; TIS
MEDLINE-93183402;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SMPD1 OR ASM.
                                                                                                                                                                                                                                                          DOMAIN
                                                                                                                                                                                                                                                                                                                                Pfam; PF00149; Metallophos; 1. SMART; SM00118; SAPB; 1.
                                                                                                                                                                                                                                                                                                                                                                PIR; S27392; S27392.

PIR; S27393; S27393.

MGD; MGI:98325; Smpd1.

InterPro; IPR004843; M-ppestrase.

InterPro; IPR004844; S/T_phosphtse.

InterPro; IPR000004; SapB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Strausberg R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                               Hydrolase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           between
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REVISIONS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AND 1,2-DIACYLGLYCEROLPHOSPHOGLYCEROL.

CATALITIC ACTIVITY: Sphingomyelin + H(2)0 = N-acy choline phosphate.

SUBUNIT: MONOMER.

SUBCELLULAR LOCATION: Lysosomal.

SUBCELLABEOUS: THERE ARE TWO TYPES OF SPHINGOMYEL (ACID), AND NSM (NEUTRAL).

SIMILARITY: BELONGS TO THE ACID SPHINGOMYELINASE SIMILARITY: CONTAINS 1 SAPOSIN B-TYPE DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    s SWISS-PROT entry is copyright. It is produced through a collaboration ween the Swiss Institute of Bioinformatics and the EMBD outstation - Buropean Bioinformatics Institute. There are no restrictions on its by non-profit institutions as long as its content is in no way
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          nitted (JUL-2001) to the EMBL/GenBank FUNCTION: CONVERTS SPHINGOMYELIN TO PHOSPHOLIPASE C ACTIVITIES TOWARD 1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Z14252; CAA78619.1; -.
Z14132; CAA78506.1; -.
BC011304; AAH11304.1; -.
                      4
                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TO
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                                                                                                                                                                                                                                                                                                               Glycosidase;
                                                                                                                              173
173
333
393
484
611
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                                                                                    44
627
167
184
173
173
333
393
393
518
611
48
69927
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chordata;
Rodentia;
                                 76.9%;
57.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AND
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        the EMBL/GenBank/DDBJ databases.
SPHINGOMYELIN TO CERAMIDE. ASM ALSO HAS
IVITIES TOWARD 1,2-DIACYLGLYCEROLPHOSPHOCHOLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                             Lysosome; Glycoprotein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           384.
                                                                                            MW;
                                                                                                       POTENTIAL.

SAPOSIN-LIKE TYPE B.

N-LINKED (GLCNAC. .) (POTENTIAL)

S-> T (IN REF. 3)

G-> S (IN REF. 3)
                    0
                                     Score 30; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                            0FFC7EA74EE71E91
                      Mismatches
                                                                                                                                         D (GLCNAC...) (POTENTIAL).
                                     DB 1;
1.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      H(2)O = N-acylsphingosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SPHINGOMYELINASES:
                                                    Length 627
                                                                                            CRC64;
                                                                                                                                                                                                                                                                                                               Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FAMILY
                  0;
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                    Gaps
                  0;
HGL2_
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AC
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SYLA_AQUAE
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                                                                                                             RESULT
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                                                                                          ARATH
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                                                                                                                                                                                                                                                                                                                                                  Complete
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Query Match
Best Local Similarity
Matches 4; Conserv
30-MAY-2000
30-MAY-2000
16-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=98196666; PubMed=9537320;
Deckert G., Warren P.V., Gaasterland T., Young W.G.
Graham D.E., Overbeek R., Snead M.A., Keller M., Au
Feldman R.A., Short J.M., Olson G.J., Swanson R.V.;
                                                                                                                                                                                                                                                                                                                                            TIGRFAMS; TIGR00396; leus_bact; 1. PROSITE; PS00178; AA_TRNA_LIGASE_I;
                                                                                                                                                                                                                                                                                                                                                                                         InterPro; IPR002302; Leu-tRNAsynt1:
InterPro; IPR002300; tRNA-synt_1a.
InterPro; IPR001412; tRNA-synt_I.
Pfam; PF00133; tRNA-synt_1; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       HSSP; P96142;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      entities requires a license agreement (S or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     modified and this statement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  between the Swiss Institute of Bioinformatics Institute
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -i- CATALYTIC ACTIVITY: ATP + L-leucine + diphosphate + L-leucyl-tRNA(Leu).
-i- SUBUNIT: SEEMS TO CONSIST OF AN ALPHA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nature 392:353-358(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-MAY-2000 (Rel. 39, Last sequence up 16-0CT-2001 (Rel. 40, Last annotation Leucyl-trna synthetase alpha subunit ligase alpha subunit) (Leurs).
                                                                                                                                                                                                                                                                                                                           Aminoacyl-tRNA synthetase;
                                                                                                                                                                                                                                                                                                                                                                          PRINTS; PR00985;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bacteria; Aquificae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Aquifex aeolicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "The complete genome of the hyperthermophilic bacterium Aquifex aeolicus.";
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=63363;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUBCELLULAR LOCATION: Cytoplasmic.
SIMILARITY: BELONGS TO CLASS-I AMINOACYL-TRNA SYNTHETASE FAMILY.
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                                                                                                                                                   NTTCPKC
                                                                                                                                                                             NXXCPXC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AE000685;
                                                                                                                                                                                                                                                                                                           proteome.
                                                                                                                                                                                                                                                                              634 AA;
 (Rel. 32, Created)
(Rel. 35, Last sequence (Rel. 41, Last annum
                                                                                                                                                                                                               Conservative
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                                                                    STANDARD;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAC06643.1; -.
                                                                                                                                                                                                                                                                                                                                                                            TRNASYNTHLEU
 35, Last sequence up 41, Last annotation
                                                                                                                                                                                                                                                                              51
73989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    institutions as long
                                                                                                                                                                                                                              76.9%;
57.1%;
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                                                                                                                                                                                                                                                                              MW;
                                                                                                                                                                                                                                                                                                                           Protein biosynthesis; Ligase; ATP-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    is not removed.
                                                                                                                                                                                                               0;
                                                                                                                                                                                                                               Score 30;
Pred. No.
                                                                                                                                                                                                                                                                              "HIGH" REGION..
0119CA3F7A018766 CRC64;
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                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AN ALPHA CHAIN AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         e update)
ion update)
it (EC 6.1.1.4)
                    update)
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                                                                                                                                                                                                                                              DΒ
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                                                                                                                                                                                                                                              Length 634;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Aujay
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                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A BETA CHAIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    restrictions
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a collaboration
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Huber
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for
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update)

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RA Theologis A., Ecker J.R., Palm C.J., Federspiel N.A., Kaul S.,
RA White O., Alonso J., Altafi H., Araujo R., Bowman C.L., Brooks S.Y.,
RA Buehler E., Chan A., Chao Q., Chen H., Cheuk R.F., Chin C.W.,
RA Dunn P., Etgu P., Feldblyum T.V., Feng J.-D., Fong B., Fujii C.Y.,
RA Chung M.K., Conn L., Conway A.B., Conway A.R., Creasy T.H., Dewar K.,
RA Chung J.E., Goldsmith A.D., Haas B., Hansen N.F., Hughes B., Huizar L.,
RA Hunter J.L., Jenkins J., Johnson-Hopson C., Khan S., Khaykin E.,
RA Kim C.J., Koo H.L., Kremenetskaia I., Kurtz D.B., Kwan A., Lam B.,
RA Kim C.J., Koo H.L., Kremenetskaia I., Kurtz D.B., Kwan A., Lam B.,
RA Lin X., Liu S.X., Liu Z.A., Luros J.S., Maiti R., Marziali A.,
RA Lin X., Liu S.X., Liu Z.A., Luros J.S., Maiti R., Marziali A.,
RA Militscher J., Miranda M., Nguyen M., Nierman W.C., Osborne B.I.,
RA Pai G., Peterson J., Pham P.K., Rizzo M., Rooney T., Rowley D.,
RA Sakano H., Salzberg S.L., Schwartz J.R., Shinn P., Southwick A.M.,
RA Sakano H., Van Aken S., Vaysberg M., Vysotskaia V.S., Walker M.,
RA Wu D., Yu G., Fraser C.M., Venter J.C., Davis R.W.;
"Sequence and analysis of chromosome 1 of the plant Arabidopsis
                                                                                                                           between the Swiss Institute of Bioinformatics the European Bioinformatics Institute. There a use by non-profit institutions as long as i modified and this statement is not removed. Us entities requires a license agreement (See http or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homeobox protein GLABRA2 (Homeobox-leucine zipper protein ATHB-10) (HD-ZIP protein ATHB-10). GLI Protein ATHB-10). GLI OR ATIG79840 or 1918/16.20. Arabidopsis thaliana (Mouse-ear cress). Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Epwaryota; Viridiplantae; Streptophyta; Embryophyta; Rosid Spermatophyta; Magnollophyta; eudicotyledons; core eudicots; Rosid Carlotte (Mouse) (
                       EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN=cv. Columbia;
MEDLINE=21016719; PubMed=11130712;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "The Arabidopsis Athb-10 (GLABRA2) is an regulation of root hair development.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=96407838; PubMed=8811855; di Cristina M., Sessa G., Dolan L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           trichome development in Arabidopsis."; Genes Dev. 8:1388-1399(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN=cv. Wassilewskija; TISSUE=Seedling; MEDLINE=95011550; PubMed=7926739;
                                                                                                                                                                                                                                                                                                      This SWISS-PROT entry is copyright. It is produced through a collaboration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nature 408:816-820(2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Plant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN-cv.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (NOV-1996) to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Marks
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rerie
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=3702;
                                                                                                                                                                                                                                                                                                                                                        SUBCELLULAR LOCATION: Nuclear (Probable).
TISSUE SPECIFICITY: EXPRESSED IN DEVELOPING
SIMILARITY: BELONGS TO THE HD-ZIF HOMEOBOX F
SIMILARITY: CONTAINS 1 HOMEOBOX DOMAIN.
SIMILARITY: CONTAINS 1 START DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FUNCTION: REQUIRED FOR CORRECT MORPHOLOGICAL DEVELOPMENT MATURATION OF TRICHOMES AS WELL AS FOR NORMAL DEVELOPMENT COAT MUCILAGE.
AC011717;
P01367; 1#
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                                                     L32873; AAC80260.1; Z54356; CAA91183.1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Brassicales; Brassicaceae; Arabidopsis.
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                                                                                                                                                                 (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                 There are no restrictions ng as its content is in
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                                                                                                                                                                                            Usage
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                                                                                                                                                                                                                                                                                                                                                                                                                         G TRICHOMES FAMILY.
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NELL_HUMAN STANDARD; PRT; 810 AA. 092832; 09Y472; 01-NOV-1997 (Rel. 35, Created) 16-OCT-2001 (Rel. 40, Last sequence update) 15-JUN-2002 (Rel. 41, Last annotation update) Protein kinase C-binding protein NELL1 precursor (NEL-like (Nel-related protein 1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PROSITE;
                  This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EW the European Bioinformatics Institute. There are no restruse by non-profit institutions as long as its content modified and this statement is not removed. Usage by and entities requires a license agreement (See http://www.isb-sorsend an email to license@isb-sib.ch).
                                                                                                                                                                                                                                               SEQUENCE OF 383-810 FROM N.A.
Ting K., Vastardis H., Mulliken J.B.,
Young M., Tieu A., Kwong E.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Watanabe T.K., Katagiri T., Suzuki M., Shimizu F., Fujiwara T., Kanemoto N., Nakamura Y., Hirai Y., Maekawa H., Takahashi E.; Roning and characterization of two novel human cDNAs (NELL1 and NELL2) encoding proteins with six EGF-like repeats.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE=Brain;
MEDLINE=97131504; PubMed=8975702;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DOMAIN
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SMART; SM00234; START; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pfam; PF00046; homeobox; 1. Pfam; PF01852; START; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (Human).
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PS50071; HOMEOBOX_2;
PS50848; START; 1.
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                                                                                                                                                                                                                                                                                                                                                                                    log gene expression in craniofacial anomalies."; (SEP-1996) to the EMBL/GenBank/DDBJ databases.
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Primates;
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57.1%;
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Pred. No.
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ASP/GLU-RICH (ACIDIC).
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EMBL; U57523; I
HSSP; P07204; I
Genew; HGNC:779
MIM; 602319; -
DOMAIN
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PROSITE; PS00022; EGF_1; 1.
PROSITE; PS01186; EGF_2; 3.
PROSITE; PS01187; EGF_CA; 3.
PROSITE; PS01208; VWFC; 2.
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n; PF002093; VWC; 3.

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RT; SM00179; EGF_CA; 2.

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AAB06946.1;
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      MW;
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                        ILIN; Repeat; Signal.

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-> D (IN REF. 2).

-> H (IN REF. 2).

-> C (IN REF. 2).

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      CRC64;
                                                                                                          (POTENTIAL)
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Best Local S
Matches 4
   Pfam; PF00008; EGF; 4.

Pfam; PF000093; VWC; 3.

Pfam; PF02210; TSPN; 1.

SMART; SM00179; EGF CA; 2.

SMART; SM00001; EGF_like;

SMART; SM002082; LamG; 1.

SMART; SM00214; VWC; 4.

PROSITE; PS00010; ASX_HYU
PROSITE; PS00010; ASX_HYU
PROSITE; PS001186; EGF_1;
PROSITE; PS01186; EGF_2;
PROSITE; PS01187; EGF_CA;
PROSITE; PS01187; EGF_CA;
CALYCOPTOLEIN; EGF-Like dc
SIGNAL 1 16
CHAIN 17 810
DOMAIN 81 230
DOMAIN 335 390
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Q62919;

Q1-NOV-1997 (Re.

30-MAY-2000 (Re.

15-JUN-2002 (Re.

Protein kinase (
                                                                                                                                                                                                                         InterPro;
InterPro;
Pfam; PFOC
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InterPro;
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                                                                                                                                                                                                                                                                                                                                                                                                                                             "Biochemical characterization and expression analysis thrombospondin-1-like proteins NELL1 and NELL2."; Biochem. Blophys. Res. Commun. 265:79-86(1999).

-i- SUBUNIT: HOMOTRIMER. BINDS TO PKC BETA-1.

-i- SUBCELLULAR LOCATION: Secreted.

-i- SIMILARITY: CONTAINS 1 TSP N-TERMINAL DOMAIN.

-i- SIMILARITY: CONTAINS 5 VMFC DOMAINS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                entities requires a or send an email to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN=Sprague-Dawley; TISSUE=Brain; MEDLINE=20017976; pubMed=10548494; Kuroda S., Oyasu M., Kawakami M., Kahabe T., Matsuhashi S., Ting K.;
                                                                                                                                                                                                                                                                                      InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                  InterPro;
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rPro; IPR000561; I
rPro; IPR001881; I
rPro; IPR001791; I
rPro; IPR003129; 7
rPro; IPR001007; V
; PF00008; EGF; 4.
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SPN; 1.

VWC; 4.

J; ASX_HYDROXYL; 3.

22; EGF=1; 1.

186; EGF=2; 3.

1187; EGF-CA; 3.

J1208; VWFC; 2.

2n; EGF-Like domair

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1810

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273

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390
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (Rel. 35, Created)
(Rel. 39, Last sequence update)
(Rel. 41, Last annotation update)
(Rel. 41, Last annotation update)
ase C-binding protein NELL1 precursor (NEL-like protein 1).
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Rodentia;
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TSPN.
VWF_C.
                                                                                                                                                                                                                                                                         Asx_hydroxyl.
EGF-like.
EGF_Ca.
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57.1%;
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      POTENTIAL C
PROTEIN KINASE C
TSP N-TERMINAL.
VWFC 1.
                                                                                                                                                                                                                                                                                                                                                                         is not removed.
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Pred. No. 1.7e
0; Mismatches
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                                                                 Repeat;
                                                                                                                                                                                                                                                                                                                                                                                                          ght. It is produced through a c
Bioinformatics and the EMBL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kanayama
                                         KINASE C-BINDING
                                                                                                                                                                                                                                                                                                                                                                                     long
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1.7e+02;
                                                                 Signal
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; Murinae; Rattus.
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                                                                                                                                                                                                                                                                                                                                                                                                            collaboration -
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Mammalia; Eutheria; I
NCBI_TaxID=9606;
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DO
                       SEQUENCE FROM N.A.

TISSUE=Brain;

TISSUE=Brain;

MEDLINE=97131504; PubMed=8975702;

MEDLINE=97131504; PubMed=8975702;

Matanabe T.K., Katagiri T., Suzuki M., Shimizu F., Fujiwara Watanabe T.K., Katagiri T., Hirai Y., Maekawa H., Takahashi E.

"Cloning and characterization of two novel human cDNAs (NELL NELL2) encoding proteins with six EGF-like repeats.";

Genomics 38:273-276(1996).
                                                                                                                                                                                                                                                                                                                                            01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Protein kinase C-binding protein NELL2 prec
(Nel-related protein 2).
NELL2 OR NRP2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HUMAN
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CARBOHYD
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DOMAIN
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Q99435;
                                                                                                                                                                                                                                                                                                                              Homo sapiens (Human).
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           N-TERMINAL DOMAIN
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4; Conservative
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Primates;
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57.1%;
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EGF-LIKE 2, CALCIUM-B
EGF-LIKE 3.

EGF-LIKE 4.

EGF-LIKE 5, CALCIUM-B
EGF-LIKE 6, CALCIUM-B
EGF-LIKE 1, CALCIUM-B
EGF-L
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Pred. No.
                                                                                                                                                                                                                                                                             Craniata; Vertebrata; Catarrhini; Hominidae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
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2 precursor
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1.7e+02;
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                                                                                                                                                                                                                                                                               Hominidae;
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                                                                                                                                                                                                                                                                                                                                                                                           (NEL-like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (POTENTIAL)
                                                                                                                                                                                                                                                                                                    Euteleostomi;
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                                                                                             (NELL1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (POTENTIAL)
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           Glycoprotein;
SIGNAL
CHAIN
2 HOMAIN
DOMAIN
3 HOMAIN
DOMAIN
DISULFID
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SMART;
SMART;
SMART;
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Pfam; I
SMART;
    DISULFID
DISULFID
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DISULFID
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PROSITE: PS00022; EGF_1; 1.
PROSITE: PS01186; EGF_2; 4.
PROSITE: PS01187; EGF_CA; 3.
PROSITE: PS01208; VWFC; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    InterPro; InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This SWISS-PROT entry is copyright. It is produced through a collaboratic between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on it use by non-profit institutions as long as its content is in no was modified and this statement is not removed. Usage by and for commercia entities requires a license agreement (See http://www.isb-sib.ch/announce or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Merging extracellular domains: fold prediction for laminin G-lik and amino-terminal thrombospondin-like modules based on homology pentraxins.",
J. Mol. Biol. 275:725-730(1998).
-!- SUBUNIT: HOMOTRIMER. BINDS TO PKC BETA-1 (BY SIMILARITY).
-!- SUBCELLULAR LOCATION: Secreted (By similarity).
-!- SIMILARITY: CONTAINS 1 TSP N-TERMINAL DOMAIN.
-!- SIMILARITY: CONTAINS 5 WWFC DOMAINS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              InterPro;
InterPro;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             InterPro;
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n; PF00093; vwc; 3.
n; PF00210; TSPN; 1.
2T; SM00179; EGF_CA; 3.
2T; SM00001; EGF_like; 3.
2T; SM002021; LamG; 1.
2T; SM00210; TSPN; 1.
2T; SM00214; VWC; 3.
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IPR000561;
IPR001881;
IPR001791;
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       Asx_hydroxyl.
EGF-like.
EGF_Ca.
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PROTEIN KINASE C-BINDING P
PROTEIN KINASE C-BINDING P
VWFC 1.

VWFC 2.

EGF-LIKE 1.

EGF-LIKE 2, CALCIUM-BINDIN
EGF-LIKE 3,

EGF-LIKE 4.

EGF-LIKE 6, CALCIUM-BINDIN
EGF-LIKE 6, CALCIUM-BINDIN
EGF-LIKE 5, CALCIUM-BINDIN
EGF-LIKE 6, CALCIUM-BINDIN
EGF-LIKE 7, CALCIU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Repeat; Signal.
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FT DISULFID 630 636 BY SIMILARITY.
FT DISULFID 630 636 BY SIMILARITY.
FT CARBOHYD 53 53 N-LINKED (GLCNAC. . ) (POTENTIAL).
FT CARBOHYD 293 293 N-LINKED (GLCNAC. . ) (POTENTIAL).
FT CARBOHYD 517 517 N-LINKED (GLCNAC. . ) (POTENTIAL).
FT CARBOHYD 515 615 N-LINKED (GLCNAC. . ) (POTENTIAL).
FT CARBOHYD 615 615 N-LINKED (GLCNAC. . ) (POTENTIAL).
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FT CARBOHYD 635 635 N-LINKED (GLCNAC. . ) (POTENTIAL).
FT CARBOHYD 635 63
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Result
No.
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Maximum DB seq length: 2000000000
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Perfect score:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Scoring table:
Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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Match
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39
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PIR_73:*
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pir2:*
pir3:*
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GenCore version (c) 1993 - 2002
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T25423
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B72782
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S72793
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2 VCAO
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A;Description: Pyrococcus at A;Reference number: A75001 A;Recession: E75133 A;Status: preliminary A;Molecule type: DNA A;Residues: 1-367 <KAW> C; Accession: S48833
C; Accession: S48833
R; Pedroni, P.
submitted to the EMBL Data R; anonymous, Genoscope R; anonymous, Genoscope submitted to the EMBL Data Library, July 1999 cytochrome-c3 hydrogenase (EC 1.12.2.1) alpha chain - Pyrococcus furiosus C;Species: Pyrococcus furiosus C;Date: 10-Dec-1994 #sequence_revision 13-Mar-1997 #text_change 09-Jun-2000 RESULT S48833 cytochrome-c3 hydrogenase (EC 1.12.2.1) beta chain PAB1784 - Pyrococcus abyssi C; Species: Pyrococcus abyssi C; Date: 20-Aug-1999 #sequence_revision 20-Aug-1999 #text_change 20-Jun-2000 C; Date: 20-Boccession: E75133 A;Start codon: GTG C;Superfamily: Pyrococcus : C;Keywords: oxidoreductase A;Status: preliminary A;Molecule type: DNA A;Residues: 1-367 <PED> A;Gene: PAB1784 C;Superfamily: Pyrococcus furiosus C;Keywords: oxidoreductase RESULT E75133 A; Reference number: A; Accession: S48833 A;Cross-references: GB:AJ248285; GB:AL096836; NID:g5458067; A;Experimental source: strain Orsay 맒 ρy A;Cross-references: EMBL:X75255; NID:g562773; PID:g563905 Matches Query Match Best Local : Superfamily: Pyrococcus furiosus cytochrome-c3 hydrogenase alpha chain Query Match Best Local 240 NTTCPTC 246 Local Similarity tes 4; Conserv 4 NXXCPXC 10 Similarity 4; Conserv 79.5%; nilarity 57.1%; Conservative Conservative 79.5%; Library, September 1993 Score 31; DB 2; L Pred. No. 4.1e+02; 0; Mismatches 3; Score 31; DB Pred. No. 4.1e 0; Mismatches 0; cytochrome-c3 ALIGNMENTS 4.1e+02; DB 2; hydrogenase Length 367; Length 367 Indels alpha 0; 0; Gaps Gaps 0; 0

insights into archaeal chromosome PIDN:CAB49782.1; PID:g545 (strai

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hypothetical protein B - Proteus vulgaris C;Species: Proteus vulgaris C;Date: 31-Dec-1990 #sequence_revision 31-Dec-1990 #text_change 20-Sep-1999 C;Accession: S00118 R;Cole, S.T.
                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Reference number: A96900; MUID:21359325; PMID:21359325 A;Accession: H97289
                                                                                     RESULT
S00118
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R;Nolling, J.; Breton, G.; Omelchenko, M.V.; Markarova, R;Nolling, J.; Benett, G.N.; Koonin, E.V.; Smith, D.R.; Daly, M.J.; Benett, G.N.; Z001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Octave, Fig. DNA
A; Molecule type: DNA
A; Residues: 1-534 <WIL>
A; Cross-references: EMBL: Z98866; PIDN: CAB11566.1; GSPDB: GN00021; CESP: Y49E10.20
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A; Residues: 1-552 <KUR>
A; Residues: 1-552 <KUR>
A; Cross-references: GB:AE001437; PIDN:AAK81107.1;
A; Experimental source: Clostridium acetobutylicum
                                                                                                                                                                                                                                                                                                                                                                                                                        A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   dihydroxy-acid dehydratase [imported] - Clostridium acetobutylicum
C;Species: Clostridium acetobutylicum
C;Date: 14-Sep-2001 #sequence_revision 14-Sep-2001 #text_change 30
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A; Introns: 42/3; 105/2; C; Superfamily: lysosomal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      submitted to the EMBL Data Library, Aug
A; Reference number: Z20303
A; Accession: T27054
A; Status: preliminary; translated from
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L integral membrane protein II
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57.1%;
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Pred. No. 5.2e+02;
0; Mismatches 3
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Pred. No. 5.1e+02;
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C; Accession: F88765
R; anonymous, The C. elegans Sequencing Consortium.
Science 282, 2012-2018, 1998
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F88765
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A;Map position: 4
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T25411
                                                                                                                                                A; Molecule type: DNA
A; Residues: 1-117 <STO>
                                                                                                                                                                                                                           A;Title: Genome sequence of the nematode C. elegans: a platform for investigating bid A;Reference number: A75000; MUID:9959513; PMID:9959116
A;Roference number: A75000; MUID:9959513; PMID:9851916
A;Rote: see websites genome.wustl.edu/gsc/C_elegans/ and www_sanger.ac.uk/Projects/C_A;Note: published errata appeared in Science 283, 35, 1999; Science 283, 2103, 1999;
                                                                                                                                                                                                                                                                                                                                         C;Date: 10-May-2001 #sequence_revision
C;Accession: F88765
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A; Reference number: S00107; MUID:88004470; PMID:3308458
A; Accession: S00118
                                                                                              A; Gene:
                                                                                                                                                                                                         A; Note: published errata
A; Accession: F88765
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C; Species: Caenorhabditis elegans
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A; Residues: 1-117 <WIL>
A; Cross-references: EMB
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                                                                                                                               A; Cross-references:
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A; Residues: 1-113 <COL>
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A; Title: Nucleotide sequence and comparative analysis of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Experimental source: clone
Matches
                   Query Match
Best Local
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Best Local :
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nes 4; Conserv
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Similarity 4; Conserv
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                                                                                                                                 GB:chr_IV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL: Z54238; PIDN: CAA90999.1; GSPDB: GN00022; CESP: T28C6.8 se: clone T28C6
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57.18;
                   76.98;
57.18;
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57.1%;
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                                                                                                                                 PIDN:CAA90999.1; PID:g4038509;
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 Score 30; DB
Pred. No. 2.9e
0; Mismatches
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Pred. No. 2
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Pred. No. 2.9e+02;
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2.9e+02;
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                                     Length 117;
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B72782

B72782

Bypothetical protein APE0243 - Aeropyrum pernix (strain K1)

C;Species: Aeropyrum pernix

C;Decies: Aeropyrum pernix

C;Date: 20-Aug-1999 #sequence_revision 20-Aug-1999 #text_change 09-Jun-2000

C;Accession: B72782

R;Kawarabayasi, Y.; Hino, Y.; Horikawa, H.; Yamazaki, S.; Haikawa, Y.; Jin-no, awa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazabaya Res. 6, 83-101, 1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Status, France: DNA
A; Molecule type: DNA
A; Residues: 1-144 <HEI>
A; Cross-references: GB: AE004403; GB: AE003853; NID: g9658159;
A; Cross-references: GB: AE004403; GB: AE003853; NID: g9658159;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT
T27456
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;Species: Vibrio cholerae
C;Date: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 02-Feb-2001
C;Accession: B82423
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A;Introns: 19/3; 52/3
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A;Experimental source: clone Y87G2A
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hypothetical protein Y87G2A.d - Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Decies: Caenorhabditis elegans C;Date: 15-Oct.1999 #sequence_revision 15-Oct.1999 #text_change 15-Oct.1999 C;Accession: T27456
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C; Superfamily: thioredoxin; thioredoxin homology
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A; Residues: 1-118 <WIL>
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4; Conserv
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57.1%;
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57.1%;
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Pred. No. 3e+(
0; Mismatches
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Pred. No. 3.3e+02;
0; Mismatches 3;
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El Tor
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H.; Dragoi,
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                                        in-no, K.;
Yamazaki,
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I.; Sellers,
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                                                           Takah
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D82361
              A;Title: DNA Sequence of both chromosomes of the cholera pathogen Vibrio cholerae A;Reference number: A82035; MUID:20406833; PMID:10952301 A;Accession: D82361 A;Status: preliminary
                                                                                                      R;Heidelberg, J.F.; Eisen, J.A.; Nelson, W.C.; Clayton, R.A.; Gwinn, M.L.; chardson, D.; Ermolaeva, M.D.; Vamathevan, J.; Bass, S.; Qin, H.; Dragoi, J., R.R.; Mekalanos, J.J.; Venter, J.C.; Fraser, C.M.
Nature 406, 477-483, 2000
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                                                                                                                                                                                                                      C;Species: Vibrio cholerae
C;Date: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 02-Aug-2002
                                                                                                                                                                                                C; Accession: D82361
                                                                                                                                                                                                                                                                     conserved hypothetical protein VC0131 [imported] - Vibrio cholerae (strain N16961
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A;Title: Complete genome sequence of an aerobic hyper-thermophilic Crenarchaeon, R;Reference number: A72450; MUID:99310339; PMID:10382966
A;Accession: B72782
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-148 <KAN>
A;Residues: 1-148 <KAN>
A;Cross-references: DDBJ:AP000058; NID:g5103388; PIDN:BAA79156.1; PID:d1042932; FA;Experimental source: strain K1
                                                                                                                                                                                                     A;ACCCCAACH.
A;Molecule type: DNA
A;Residues: 1-165 <URR>
A;Cross references: EMBL:274056; NID:g1430968; PIDN:CAA98564.1;
A;Cross references: Strain S288C
                                                                                                                                                                                                                                                                                              A:Experimental source: strain S288C R;Urrestarazu, L.A.; Andre, B.; Vissers, S. submitted to the Protein Sequence Database, A;Reference number: S67535 A;Accession: S67540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R;Andre, B.; Vissers, S.; Urrestarazu, L. submitted to the EMBL Data Library, February 1995 A;Description: The sequence of a 42 kb segment located
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C;Species: Saccharomyces cerevisiae
C;Date: 08-May-1995 #sequence_revision
C;Accession: S52511; S67540
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                                                                                                                                                 A;Gene: SGD:APC11
A;Cross-references:
A;Map position: 4L
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                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Reference number: S52492
A; Accession: S52511
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A; Residues: 1-165 < AND>
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                                                                           Matches
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49 NGTCPSC
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                                                                                                                                                                                                                                                                                                                                       Sequence Database,
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                                                                                           76.9%;
57.1%;
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Pred. No.
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                                                                                             6e+02;
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                                                                                                          Length 165
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                                                                           0;
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Dodson, R. I.; Sellers

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type IV prepilin peptidase (EC 3.4.99.-) pilD - Pseudomonas aeruginosa N;Alternate names: inner membrane protein xcpA N;Contains: type IV pilin N.methyltransferase (EC 2.1.1.-) C:Species: Pseudomonas aeruginosa C:Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 31-Dec C:Accession: A39131; C35384; D83078 R:Bally, M.; Ball, G.; Badere, A.; Lazdunski, A. J. Bacteriol. 173, 479-486, 1991
                                                                                     A;Cross-references: GB:M61096; GB:M38720; NID:g151641; PIDN:AAA26023.1; PID:g151642 R;Nunn, D.; Bergman, S.; Lory, S. J. Bergman, S.; 1919. J. Bacteriol. 172, 2911-2919, 1990 A;Title: Products of three accessory genes, pilB, pilC, and pilD, are required for lA;Reference number: A35384; MUID:90264276; PMID:1971619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R;Cornelissen, B.J.C.; Janssen, H.; Zuidema, D.; Bol, J.F. Nuccleic Acids Res. 12, 2427-2437, 1984 A;Title: Complete nucleotide sequence of tobacco streak virus RNA A;Reference number: A93507; MUID:84169544; PMID:6546793 A;Accession: A04206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N;Alternate names: P4 protein
C;Species: tobacco streak virus, TSV
A;Note: host Nicotiana glutinosa x N. clevelandii (tobacco)
C;Date: 28-Aug-1985 #sequence_revision 28-Aug-1985 #text_change 23-Jul-1999
C;Accession: A04206
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VCBVWC
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A;Mosecule type: HEI>
A;Residues: 1-198 <HEI>
A;Cross-references: GB:AE004103; GB:AE003852; NID:g9654523; PIDN:AAF93308.1;
A;Experimental source: serogroup O1; strain N16961; biotype El Tor
A; Molecule type: DNA
A; Residues: 1-17, 'A', 19-290 <NUN>
A; Cross-references: GB: M32066; NI
                                                                                                                                                                                                                                  A;Molecule type: DNA
A;Residues: 1-290 <BAL>
                                                                                                                                                                                                                                                                          A;Reference number: A39131;
A;Accession: A39131
A;Status: preliminary
                                                                                                                                                                                                                                                                                                                          A; Title: Protein secretion in Pseudomonas aeruginosa: the A; Reference number: A39131; MUID:91100333; PMID:1898929
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C;Superfamily: Escherichia coli hypothetical protein b2583
                                                                       A;Status: preliminary
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Cross-references: GB:X00435; NID:g62146; PIDN:CAA25133.1; PID:g62148
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A; Residues: 1-237 <COR>
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57.1%;
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57.1%;
  NID:g151064; PIDN:AAA25734.1; PID:g151067
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Pred. No. 4e+02;
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Pred. No.
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Search completed: December 13, Job time: 4.91411 secs

2002, 08:40:10

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В
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A;Title: The genome of Melanoplus sanguinipes entomopoxvirus.
A;Reference number: 220484; MUID:99102612; PMID:9847359
A;Accession: T28188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hypothetical protein ORF29 · Melanoplus sanguinipes entomopoxvirus (isolate Tuscon) N;Alternate names: ORF MSV027 tryptophan repeat gene family protein C;Species: Melanoplus sanguinipes entomopoxvirus
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Nature 406, 959-964, 2000
                                δÃ
                                                                                                                                                                                                                                                                       A; Molecule type: DNA
A; Residues: 1-297 <AFO>
                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Variety: isolate Tuscon C; Date: 21-Jan-2000 #sequ
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                                                                                                                                                                                                                                    A;Cross-references: EMBL:AF063866; NI
A;Experimental source: isolate Tuscon
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A; Residues: 1-290 <STO>
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A;Reference number: A82950; MUID:20437337; PMID:10984043
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family: type IV prepilin peptidase
rds: hydrolase; methyltransferase; S-adenosylmethionine;
                                    4 NXXCPXC 10
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  NSTCPMC
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57.1%;
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Pred. No.
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Pred. No. 5
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.1e+02;
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K.R.; Kas,
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K.; L
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Result
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Maximum Match 100%
Listing first 45 summaries
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 Pending_Patents_AA_New: *
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                                                                                                                                                                                                                                                                                                                                                                       /cgn2_6/ptodata/1/paa/VCT_NEW_COMB.pep:*
/cgn2_6/ptodata/1/paa/US06_NEW_COMB.pep:*
/cgn2_6/ptodata/1/paa/US07_NEW_COMB.pep:*
/cgn2_6/ptodata/1/paa/US08_NEW_COMB.pep:*
/cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep:*
/cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep:*
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 GenCore version (c) 1993 - 2002
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US-09-989-733-295
US-10-125-923A-222
US-10-174-575-222
US-10-174-575-222
US-10-174-676-78298
US-09-724-676A-78298
US-09-724-676A-78529
US-09-724-676A-78522
US-09-724-676A-78522
US-09-724-676A-78522
US-09-724-676A-78521
US-10-286-264-80
US-10-286-264-80
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US-09:513-999C-7264
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                                                                                                                                            RESULT 2
                                                                                                           Sequence 295, Applic GENERAL INFORMATION:
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Best Local :
                            APPLICANT:
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TYPE: PRT
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                                                                                                   Ashkenazi, Avi J.
                  Gerritsen, Mary E.
                             Gerber, Hanspeter
                                    Fong, Sherman
                                                Ferrara, Napoleone
                                                          Desnoyers, Luc
Eaton, Dan L.
                                                                              Botstein, David
                                                                                        Baker, Kevin
                                                                                                                      Application US/09989733
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45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	
28	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	
71.8	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	
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US-09-701-080C-1	US-10-231-778-2	US-10-092-411A-5060	US-09-724-676A-62865	US-09-724-676-62865	US-09-724-676A-62862	US-09-724-676-62862	US-09-724-676A-62864	US-09-724-676-62864	US-09-724-676A-62863	US-09-724-676-62863	US-10-264-237-2355	US-10-092-411A-5436	US-09-724-676A-71193	US-09-724-676-71193	US-10-288-160-8	US-60-425-113-62	US-60-425-113-49	US-10-057-498-26222	
Sequence 1, Appli	Sequence 2, Appli	Sequence 5060, Ap	Sequence 62865, A	Sequence 62865, A	Sequence 62862, A	Sequence 62862, A	Sequence 62864, A	Sequence 62864, A	Sequence 62863, A	Sequence 62863, A	Sequence 2355, Ap	Sequence 5436, Ap	Sequence 71193, A	Sequence 71193, A	Sequence 8, Appli	Sequence 62, Appl	Sequence 49, Appl	Sequence 26222, A	

ALIGNMENTS

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; NAME/KEY: UNSURE
; LOCATION: 17
; OTHER INFORMATION: Xaa=Gly or
US-09-513-999C-7264
                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 7264, Application US/09513999C
GENERAL INFORMATION:
APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Duclert, A.
APPLICANT: Giordano, J.Y.
APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: EXpressed Sequence Tags and Encoded Human Proteins.
FILE REFERENCE: 59.US2.REG
                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 36681
SOFTWARE: Patent.pm
SEQ ID NO 7264
                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/513,999C CURRENT EILING DATE: 2000-02-24 PRIOR APPLICATION NUMBER: US 60/122,487 PRIOR FILING DATE: 1999-02-26
                                                                                                                                                                                                                   ORGANISM: Homo sapiens FEATURE:
                                4 NXXCPXC 10
                                                                  Similarity 4; Conserv
                                                                    Conservative
26
                                                                                     76.9%;
57.1%;
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                                                                                     Score 30;
Pred. No.
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                                                              DB 5; L-
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APPLICANT:

Grimaldi, J. Christopher

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US-09-992-643-295
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US-09-989-733-295
                                                                                                                                                                                                      Sequence 295, Applic GENERAL INFORMATION:
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Best Local
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LENGTH: 237
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CURRENT APPLICATION NUMBER: US/09/989,733
CURRENT FILING DATE: 2001-11-01
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PRIOR FILING DATE: 1997-06-16
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
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TYPE: PRT
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FILING DATE: 1998-05-07
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FILING DATE: 1997-11-13
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                                                                                                                                                                                                                                                                                                                                                            Similarity 57.1
4; Conservative
                                                                                                                                                                                      Ashkenazi, Avi J.
                              Goddard, Audrey
Godowski, Paul J.
                                                             Gerber, Hanspeter
Gerritsen, Mary E.
Gurney, Austin L.
                                                                                                          Ferrara, Napoleone
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                Grimaldi, J.Christopher
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                                                                                                                                                                                                                    Application US/09992643
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57.1%;
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Pred. No. 3e+02;
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CURRENT FILING DATE: 2001-11-01
PRIOR APPLICATION NUMBER: 60/049787
PRIOR FILING DATE: 1997-06-16
PRIOR FILING DATE: 1997-06-16
PRIOR APPLICATION NUMBER: 60/062250
PRIOR TILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/065186
PRIOR APPLICATION NUMBER: 60/065111
PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-13
PRIOR FILING DATE: 1997-11-13
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Matches 4
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APPLICANT: Baker, Kevin P.
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LENGTH: 237
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APPLICANT:
APPLICANT:
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: P3430R1C79
CURRENT APPLICATION NUMBER: US/10/125,923A
CURRENT FILING DATE: 2002-01-15
PRIOR APPLICATION NUMBER: 10/052586
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PRIOR FILING DATE: 1998-04-28
PRIOR APPLICATION NUMBER: 60/084600
PRIOR FILING DATE: 1998-05-07
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NUMBER OF SEQ ID
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Goddard, Audrey
Godowski, Paul J
                                                                                                                 Zhang, Zemin
                                                                                                                                  Wood, William I.
                                                                                                                                                  Smith, Victoria Watanabe, Colin K.
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Stewart, Timothy A.
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57.18;
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Pred. No. 3e+C
0; Mismatches
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; ORGANISM: Homo Sapien
US-10-125-923A-222
                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/10/205,892
CURRENT FILING DATE: 2002-07-26
PRIOR APPLICATION NUMBER: 10/052586
PRIOR FILING DATE: 2002-01-15
PRIOR APPLICATION NUMBER: 60/059263
PRIOR APPLICATION NUMBER: 60/059266
PRIOR FILING DATE: 1997-09-18
PRIOR FILING DATE: 1997-09-18
PRIOR FILING DATE: 1997-09-18
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LENGTH: 237
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Remaining Prior Application data removed - See File Wrapper or PALM. NUMBER OF SEQ ID NOS: 612
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PRIOR FILING DATE: 1997-10-28
PRIOR APPLICATION NUMBER: 60/063544
PRIOR FILING DATE: 1997-10-28
                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/062250 PRIOR FILING DATE: 1997-10-17
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R FILING DATE: 1997-10-17

DR APPLICATION NUMBER: 60/063120

DR FILING DATE: 1997-10-24

DR APPLICATION NUMBER: 60/063121

DR FILING DATE: 1997-10-24
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                                                                                           APPLICATION NUMBER: 60/063121
FILING DATE: 1997-10-24
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                                                   APPLICATION NUMBER: 60/063486 FILING DATE: 1997-10-21
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FILING DATE: 1997-09-18
                  APPLICATION NUMBER: 60/063540 FILING DATE: 1997-10-28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        Watanabe, Colin K. Wood, William I.
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60/063541
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Pred. No.
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3e+02;
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; LENGTH: 237
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-205-892-222
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US-10-174-575-222
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                                                                        ; ORGANISM: Homo Sapien US-10-174-575-222
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NUMBER OF SEQ ID N
SEQ ID NO 222
LENGTH: 237
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PRIOR APPLICATION NUMBER: 60/063544
PRIOR FILING DATE: 1997-10-28
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 612
SEQ ID NO 222
LENGTH: 237
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 Matches
               Query Match
Best Local Similarity
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CURRENT FILING DATE: 2002-06-18
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TYPE: PRT
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OR FILING DATE: 1997-09-18
OR APPLICATION NUMBER: 60/062250
OR FILING DATE: 1997-10-17
OR APPLICATION NUMBER: 60/063120
OR FILING DATE: 1997-10-24
OR APPLICATION NUMBER: 60/063121
OR FILING DATE: 1997-10-24
OR APPLICATION NUMBER: 60/063486
OR APPLICATION NUMBER: 60/063480
OR APPLICATION NUMBER: 60/06340
OR FILING DATE: 1997-10-28
OR APPLICATION NUMBER: 60/063540
OR FILING DATE: 1997-10-28
OR PILING DATE: 1997-10-28
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Godowski, Paul
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                 Score 30; DB 6;
Pred. No. 3e+02;
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NAECPAC 128

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RESULT 8
US-09-724-676-78297
; Sequence 78297, Application US/09724676
; GENERAL INFORMATION:
APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative splicing
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676
; CURRENT FILING DATE: 2000-11-28
; NUMBER OF SEQ ID NOS: 97222
; SOGTWARE: PatentIn version 3.2
; SEQ ID NO 78297
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US-10-174-575A-222
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NUMBER OF SEQ ID N
SEQ ID NO 222
LENGTH: 237
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APPLICANT:
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OR FILING DATE: 1997-10-24
OR APPLICATION NUMBER: 60/063121
OR FILING DATE: 1997-10-24
OR APPLICATION NUMBER: 60/063486
OR FILING DATE: 1997-10-21
OR APPLICATION NUMBER: 60/063540
OR FILING DATE: 1997-10-28
OR FILING DATE: 1997-10-28
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FILLING DATE: 1997-09-18
APPLICATION NUMBER: 60/062250
FILING DATE: 1997-10-17
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Godowski, Paul J.
Gurney, Austin L.
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57.18;
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APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative splicing
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676A
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
SOFTWARE: Patentin version 3.2
SEQ ID NO 78297
LENGTH: 33
TYPE: PRT
ORGANISM: Homo sapiens
US-09-724-676A-78297
                                                                                                                                                                                                                                                                                                                                                                                          RESULT 10
US-09-724-676A-78297
; Sequence 78297, Appl
; GENERAL INFORMATION:
                             RESULT 11
US-09-724-676A-78298
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Best Local Similarity
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SOFTWARE: PatentIn version 3.2

SEQ ID NO 78298

LENGTH: 332
Sequence 78298, Application US/09724676A GENERAL INFORMATION:
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Best Local Similarity
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Best Local
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57.1%;
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57.18;
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Pred. No. 3.6e+02;
Pred. No. 3.6e+03;
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Pred. No. 3.6e+02;
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APPLICANT: Compugen LTD TITLE OF INVENTION: Variants of alternative FILE REFERENCE: 129181.4 Compugen

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APPLICANT: Compugen LTD

FILE REFERENCE: 129181.4 Compugen

CURRENT APPLICATION NUMBER: US/09/724,676

CURRENT APPLICATION NUMBER: US/09/724,676

CURRENT FILING DATE: 2000-11-28

NUMBER OF SEQ ID NOS: 97222

SOFTWARE: Patentin version 3.2

SEQ ID NO 78522

LENGTH: 550

TYPE: PRT

ORGANISM: Homo sapiens

US-09-724-676-78522
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US-09-724-676-78522
Sequence 78522, Application US/09724676
GENERAL INFORMATION:
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US-09-724-676A-78522
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RESULT 14
US-09-724-676-78521
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                                                                                                                                                                                                    ; ORGANISM: Homo sapiens US-09-724-676A-78522
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TITLE OF INVENTION: Variants of alternative splicing
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676A
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
SOFTWARE: Patentin version 3.2
SEQ ID NO 78522
LENGTH: 550
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Pred. No. 4.8e+02;
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Pred. No. 3.6e+02;
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NUMBER OF SEQ ID NOS: 97222
SOFTWARE: PATENTIN VERSION 3.2
SEQ ID NO 78521
LENGTH: 555
TYPE: PRT
ORGANISM: Homo sapiens
US-09-724-676-78521
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Search completed: December 13, Job time: 1.91411 secs
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US-09-724-676A-78521
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LENGTH: 555
TYPE: PRT
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TITLE OF INVENTION: Variants of alternative
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676A
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
SOFTWARE: PatentIn version 3.2
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US-10-155-881-9389
US-10-155-881-29457
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Sequence 23902, A
Sequence 23902, A
Sequence 20004, A
Sequence 20004, A
Sequence 9389, Ap
Sequence 29457, A
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ALIGNMENTS

US-09-733-089-23902; Sequence 23902, Appl; GENERAL INFORMATION:

Application US/09733089

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APPLICANT: Doctson, Stanton B.
APPLICANT: Kovalic, David K.
APPLICANT: Liu, Jingdong
APPLICANT: Liu, Jingdong
APPLICANT: Lutiyya, Linda L.
APPLICANT: McIninch, James
APPLICANT: McIninch, James
APPLICANT: Wu, Wei
TITLE OF INVENTION: Transcription in Plants
FILLE OF INVENTION: Transcript
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APPLICANT: Lufflya, Linda L.
APPLICANT: MCINIACh, James
APPLICANT: MU, Wei
ITILE OF INVENTION: Transcription In Plants
FILE REFERENCE: 38-21(15300)D
CURRENT APPLICATION NUMBER: US/09/816,660
CURRENT APPLICATION NUMBER: US 09/474,435
PRIOR APPLICATION NUMBER: US 09/474,435
PRIOR FILING DATE: 2000-09-05
PRIOR APPLICATION NUMBER: US 09/54,617
PRIOR APPLICATION NUMBER: US 09/733,089
PRIOR FILING DATE: 2000-12-11
PRIOR APPLICATION NUMBER: US 09/733,089
PRIOR FILING DATE: 2000-10-10
PRIOR FILING DATE: 2000-10-10
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US-09-816-660-23902
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US-09-816-660-23902
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PRIOR FILING DATE: 2000-07-19
NUMBER OF SEQ ID NOS: 24143
SEQ ID NO 23902
LENGTH: 79
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SEQ ID NO 20004
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Best Local Similarity 57.1
Matches 4; Conservative
                                       APPLICANT: Lufflya, Linda L.
APPLICANT: McIninch, James
APPLICANT: McIninch, James
APPLICANT: McIninch, James
APPLICANT: Wu, Wei
TITLE OF INVENTION: Transcription In Plants
FILE OF INVENTION: Transcription In Plants
FILE REFERENCE: 38-21(15300)D
CURRENT APPLICATION NUMBER: US/09/733,089
CURRENT FILING DATE: 2000-12-11
PRIOR APPLICATION NUMBER: US 09/474,435
PRIOR APPLICATION NUMBER: US 09/654,617
PRIOR APPLICATION NUMBER: US 09/654,617
PRIOR PILING DATE: 2000-09-05
PRIOR FILING DATE: 2000-09-05
PRIOR FILING DATE: 2000-07-19
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                        NUMBER OF SEQ ID NOS: 24143
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Kovalic, David K.
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1.9e+03;
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; ORGANISM: Oryza sativa 
US-09-733-089-20004
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US-10-155-881-9389
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US-09-816-660-20004
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LENGTH: 82
                                    NUMBER OF SEQ ID NOS: 37595
SEQ ID NO 9389
LENGTH: 243
                                                                                                                                                                                                                                                                                                          Sequence 9389, Application US/10155881 GENERAL INFORMATION:
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Best Local Similarity
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Best Local
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APPLICANT: Kovalic, David K.
APPLICANT: Liu, Jingdong
APPLICANT: Liu, Jingdong
APPLICANT: Lutfiyya, Linda L.
APPLICANT: MCIninch, James
TITLE OF INVENTION: NUCLERIC ACID MOLECULES AND OTHER MOLECULES ASSOCIATED WITH
TITLE OF INVENTION: TRANSCRIPTION IN PLANTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: Nucleic Acid Molecules And Other Molecules Associated With TITLE OF INVENTION: Transcription in Plants FILE REFERENCE: 38-21(15300)D CURRENT APPLICATION NUMBER: US/09/816,660 CURRENT FILING DATE: 2001-03-26 PRIOR APPLICATION NUMBER: US 09/474,435 PRIOR APPLICATION NUMBER: US 09/474,435 PRIOR PILING DATE: 1999-12-28 PRIOR PILING DATE: 1999-12-28 PRIOR FILING DATE: 1999-15-28
                                                                                               FILE REFERENCE: 38-21(15300)J
CURRENT APPLICATION NUMBER: US/10
CURRENT FILING DATE: 2002-05-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: US 09/733,089
PRIOR FILING DATE: 2000-12-11
PRIOR APPLICATION NUMBER: ) US 09/
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ORGANISM: Zea mays
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McIninch, James
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57.1%;
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Pred. No. 2e+03;
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Pred. No. 2e+03;
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RESULT 6
US-10-155-881-29457
US-10-155-881-29457, Application US/10155881
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RESULT 8
US-09-791-537-15887
; Sequence 15887, Application US/09791537
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; Sequence 12171, Application US/09791537
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FILE REFERENCE: 38-21(15300)J
CURRENT APPLICATION NUMBER: US/10/155,881
CURRENT FILING DATE: 2007-05-22
NUMBER OF SEQ ID NOS: 37595
SEQ ID NO 29457
LENGTH: 339
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Best Local Similarity 5/.-
Generative
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SOFTWARE: PatentIn version 3.0
SEQ ID NO 12171
LENGTH: 367
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APPLICANT: Dotson, Stanton B.
APPLICANT: Kovalic, David K.
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Best Local
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APPLICANT: Debe, Derek
APPLICANT: Debe, Derek
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Kovalic, David K.
APPLICANT: Liu, Jingdong
APPLICANT: Lutfiyya, Linda L.
APPLICANT: McIninch, James
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                                                                                        NTTCPTC 246
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Pred. No. 4.1e+03;
D; Mismatches 3
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Pred. No. 5
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Pred. No. 5.1e+03;
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RESULT 10
US-09-540-236-2296
; Sequence 2296, Applic
; GENERAL INFORMATION:
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Best Local Similarity
"he'hes 4; Conservi
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APPLICANT: Goldman, Barry S.
APPLICANT: Hinkle, Gregory J.
APPLICANT: Hinkle, Gregory J.
APPLICANT: Slater, Steven C.
TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROPERTIES FILE REFERENCE: 38-10(52052)A
CURRENT APPLICATION NUMBER: US/60/360,039
CURRENT FILLING DATE: 2002-02-21
NUMBER OF SEQ ID NOS: 47374
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US-60-360-039-5906
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CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
SOFTWARE: Patentin version 3.0
SEQ ID NO 15887
               CURRENT APPLICATION NUMBER: US/09/540,236
CURRENT FILING DATE: 2000-04-04
NUMBER OF SEQ ID NOS: 3840
SEQ ID NO 2296
LENGTH: 635
TYPE: PRT
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LENGTH: 534
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Best Local
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TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
                                                                                                                         APPLICANT: GATY L. Breton et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO MORAXELLA
TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 2709.2005-001
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TYPE: PRT
ORGANISM: M.catarrhalis
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Pred. No. 6.8e+03;
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Pred. No.
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RESULT 13
US-10-219-999-51491
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Best Local Similarity
Thes 5; Conserve
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PCT-US94-07194-3
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APPLICANT: GATY L. Breton et al.
APPLICANT: GATY L. Breton et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO MORAXELLA
TITLE OF INVENTION: CATARRHALIS FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.139
CURRENT FILLE REPELICATION NUMBER: US/60/128,476
CURRENT FILING DATE: 1999-04-09
NUMBER OF SEQ ID NOS: 5002
SEQ ID NO 3650
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Best Local :
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ETILING DATE: June 29, 1993
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 635
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                         MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/07194
FILING DATE: 27-JUN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 1
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: PRIOR APPLICATION DATA:
                                                                                                                                                                                                    MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        206 NSACPTC 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              206 NSACPTC 212
                                                                                                                                                                                                                  TYPE: amino acid
TOPOLOGY: unknown
                                                                                                                                                                                                                                               LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
les 4; Conserv
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                                                              NAACPXC 12
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4; Conserv
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                                                                                                                                                                                                                                                 19 amino acids
                                                                                                                         Conservative
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57.1%;
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71.48;
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57.1%;
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                                                                                                                         0,
                                                                                                                                      Score 30; DB 1; Length 19
Pred. No. 1.1e+03;
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                                                                                                                          Mismatches
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; OTHER INFORMATION: Clone ID: 701125331_FLI
US-60-312-544-7377
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                                                                                                         US-09-330-781-260
                                                                                                                         RESULT 15
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US-60-312-544-7377
; Sequence 7377, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; ORGANISM: Zea mays US-10-219-999-51491
                                                                           Sequence 260, Application US/09330781 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 7377
LENGTH: 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US 60/324,109
PRIOR FILING DATE: 2001-09-21
PRIOR APPLICATION NUMBER: US 60/312,544
PRIOR FILING DATE: 2001-08-15
NUMBER OF SEQ ID NOS: 63520
SEQ ID NO 51491
LENGTH: 61
                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                 APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
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Best Local
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      TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Stein, Joshua
TITLE OF INVENTION: CDNA SEQUENCES AND USES FOR PLANT IMPROVEMENT
FILE REFERENCE: 38-10(52726)C
CURRENT APPLICATION NUMBER: US/10/219,999
CURRENT FILING DATE: 2002-08-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
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APPLICANT: Edgerton, Michael D
                                                                                                                                                                                                                                                                                                                                ORGANISM: Glycine max
                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
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                                                                                                                                                                     36 NSTCPLC 42
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Gearing, David P.
Robison, Keith E.
HOltzman, Douglas A.
VENTION: Nucleic Acid Molecules Derived from a
VENTION: Human Prostate Stromal Cell Library
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Kovalic, David K.
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57.18;
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57.1%;
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Pred. No. 2.3e+03;
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Pred. No. 2
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es 3;
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CURRENT PAPPLICATION NUMBER: US/09/330,781
CURRENT FILING DATE: 1999-06-11
PRIOR APPLICATION NUMBER: 60/090,179
PRIOR FILING DATE: 1998-06-22
NUMBER OF SEQ ID NOS: 490
SOFTWARE: FastSEQ for Windows Version 3.0
SEQUEN NO 260
LENGTH: 73
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SIGNAL
CORATION: (1)...(23)
US-09-330-781-260
Query Match
Best Local Similarity 57.1%; Pred. No. 2.6e+03;
Matches 4; Conservative 0; Mismatches 3; Indels 0; Gaps
Oy 4 NXXCPXC 10
A NXXCPXC 10
Db 49 NSQCPAC 55
Search completed: December 13, 2002, 08:44:49
Job time: 22.0982 secs
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OMENIAM BANK USTON

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Result
No.
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Maximum DB
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Perfect score:
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                                                                                                                                                                                                                                                                                             Score
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      protein search, using sw model
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11:
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                                                                                                                                                                                                                                                                                            Match
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      Published_Applications_AA: *
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                                                                                                                                                                                                                                                                                                                                                                                                                     /cgn2_6/ptodata/2/pubpaa/PCTUS_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
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/cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep:*
/cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
/cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
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US-09-989-723-295
US-09-989-723-295
US-09-989-727-295
US-09-989-731-295
US-09-989-731-295
US-09-989-731-295
US-09-991-073-295
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US-09-764-864-1291
US-09-764-864-836
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Sequence 1289, Ap
Sequence 1291, App
Sequence 295, App
                                                                                                                                                                                                                                                                                          Description
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ALIGNMENTS

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RESULT 2
US-09-764-864-1291
; Sequence 1291, Application US/09764864
; Patent No. US20020132753A1
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US-09-764-864-1289
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APPLICANT: ROSen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins,
FILE REFERENCE: PTZ23
CURRENT APPLICATION NUMBER: US/09/764,864
CURRENT FILING DATE: 2001-01-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 1289
LENGTH: 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1289, Application US/09764864 Patent No. US20020132753A1
                                                                                                                                                                                                Query Match
Best Local
                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Prior application data removed - consult PALM or file wrapper NUMBER OF SEQ ID NOS: 1792 SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                            NAME/KEY: SITE LOCATION: (128) OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                            NAME/KEY: SITE
LOCATION: (147)
                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: SITE LOCATION: (95)
                                                                                                                                                                              Local Similarity hes 4; Conserv
                                                                                                          27 NSQCPAC 33
                                                                                                                                            4 NXXCPXC 10
                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                 Xaa
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57.1%;
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                                                                                                                                                                              0;
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Pred. No. 1.1e+02;
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; ORGANISM: Homo sapie
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (187)
; OTHER INFORMATION: X
US-09-764-864-1291
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US-09-992-598-295
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                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: PRT; ORGANISM: Homo sapiens US-09-764-864-836
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                                                                                                                                                                        GENERAL
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APPLICANT: ROSEN et al.
TITLE OF INVENTION: Nucleic Acids,
FILE REFERENCE: PTZ23
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Best Local
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APPLICANT:
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CURRENT FILING DATE: 2001-01-17
Prior application data removed - consult PALM or file wrapper NUMBER OF SEQ ID NOS: 1792
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 836
LENGTH: 201
                          APPLICANT:
                                                        APPLICANT:
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TITLE OF INVENTION: Nucleic Acids, Proteins,
FILE REFERENCE: PTZ23
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CURRENT FILING DATE: 2001-01-17
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TYPE: PRT
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                                                                                                                                                       APPLICANT: Ashkenazi,Avi J.
 APPLICANT:
                PPLICANT:
                                                                                                                                                                                                                                                                         181 NSTCPIC 187
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                                                                                                                                                                        INFORMATION:
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                                                                                                                                                                                                                                                                                                                                             Similarity
Godowski, Paul J.
Grimaldi, J.Christopher
                                       Gerritsen, Mary E.
                                                                     Fong, Sherman
                                                                                    Ferrara, Napoleone
                                                                                               Eaton, Dan L.
                                                                                                              Desnoyers,Luc
                                                                                                                           Botstein,David
                                                                                                                                         Baker, Kevin P.
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CURRENT FILING DATE: 2001-11-14
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Stewart, Timothy A.
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DR APPLICATION NUMBER: 60/088858
DR FILING DATE: 1998-06-11
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Best Local
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OR FILING DATE: 1998-06-25
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OR APPLICATION NUMBER: 60/09137
OR APPLICATION NUMBER: 60/091478
OR APPLICATION NUMBER: 60/091478
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OR FILING DATE: 1998-07-01
OR APPLICATION NUMBER: 60/091540
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OR APPLICATION NUMBER: 60/90542
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OR APPLICATION NUMBER: 60/091982
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OR APPLICATION NUMBER: 60/092182
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Paoni, Nicholas F.
Roy, Margaret Ann
Stewart, Timothy A
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Grimaldi, J. Christopher
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Goddard, Audrey
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Eaton, Dan L.
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                                                    Napier, Mary A.
Pan, James
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OR FILING DATE: 1998-06-17
OR APPLICATION NUMBER: 60/08961
OR APPLICATION NUMBER: 60/08961
OR APPLICATION NUMBER: 60/08990
OR FILING DATE: 1998-06-18
OR APPLICATION NUMBER: 60/08991
OR APPLICATION NUMBER: 60/08994
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R APPLICATION NUMBER: 60/090435

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APPLICATION NUMBER:

60/090429

FILING DATE: 1998-06-24
APPLICATION NUMBER: 60/090535
FILING DATE: 1998-06-24
APPLICATION NUMBER: 60/090540

FILING DATE: 1998-06-24
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FILING DATE: 1998-06-24
APPLICATION NUMBER: 60/

60/090445

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TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2730P1C66
                             RENT APPLICATION NUMBER: US/09/98,293A
RENT FILING DATE: 1997-06-16
IOR APPLICATION NUMBER: 60/04978
IOR APPLICATION NUMBER: 60/06225
IOR APPLICATION NUMBER: 60/06518
IOR APPLICATION NUMBER: 60/06531
IOR FILING DATE: 1997-11-13
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IOR APPLICATION NUMBER: 60/06531
IOR APPLICATION NUMBER: 60/075945
IOR APPLICATION NUMBER: 60/078910
IOR FILING DATE: 1998-02-25
IOR FILING DATE: 1998-03-20
IOR APPLICATION NUMBER: 60/078910
IOR FILING DATE: 1998-03-20
IOR APPLICATION NUMBER: 60/08322
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Williams,
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abe, Colin K.
ams, P. Mickey
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OR FILING DATE: 1998-06-17
OR APPLICATION NUMBER: 60/089599
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OR APPLICATION NUMBER: 60/089653
OR FILING DATE: 1998-06-18
OR APPLICATION NUMBER: 60/089901
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REAPPLICATION NUMBER: 60/08
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DR FILING DATE: 1998-06-12
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APPLICATION FILING DATE:

NUMBER: 6: 1998-06-

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APPLICATION NUMBER:

60/090694

1998-06-25

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GENERAL INFORMATION:
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TITLE OF II
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IN FILLING DATE: 1998-07-07
IN APPLICATION NUMBER: 60/091982
IN FILLING DATE: 1998-07-07
OR APPLICATION NUMBER: 60/092182
OR FILING DATE: 1998-07-09
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FILING DATE: 1998-06-25
APPLICATION NUMBER: 60/090862
    OF INVENTION:
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APPLICATION NUMBER: 60/091360
FILING DATE: 1998-07-01
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4; Conservative
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Gerritsen, Mary E.
                                             Watanabe, Colin K. Williams, P. Mickey Wood, William I.
                                                                                                     Stewart, Timothy A.
                                                                                                                   Paoni, Nicholas F.
Roy, Margaret Ann
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Kljavin, Ivar J.
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Godowski, Paul J.
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PRIOR APPLICATION NUMBER: 60/062250 PRIOR FILING DATE: 1997-10-17 PRIOR APPLICATION NUMBER: 60/049787 PRIOR FILING DATE: 1997-06-16 CURRENT APPLICATION NUMBER: US/09/989,722
CURRENT FILING DATE: 2001-11-19 OR APPLICATION NUMBER: 60/087607
OR FILING DATE: 1998-06-02
OR APPLICATION NUMBER: 60/087609
OR APPLICATION NUMBER: 60/087759
OR FILING DATE: 1998-06-02
OR APPLICATION NUMBER: 60/087827
OR APPLICATION NUMBER: 60/087827
OR FILING DATE: 1998-06-03
OR APPLICATION NUMBER: 60/088021
OR APPLICATION NUMBER: 60/088021
OR APPLICATION NUMBER: 60/088025
OR APPLICATION NUMBER: 60/088025 DR FILING DATE: 1998-06-04

PREPLICATION NUMBER: 60/088167

DR FILING DATE: 1998-06-05

PREPLICATION NUMBER: 60/088202

PREPLICATION NUMBER: 60/088202

PREPLICATION NUMBER: 60/088212

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DR FILING DATE: 1998-06-04
DR APPLICATION NUMBER: 60/088030
DR FILING DATE: 1998-06-04
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DR FILING DATE: 1998-06-04
DR FILING DATE: 1998-06-04 REFERENCE: P2730P1C63 FILING DATE: 1998-U0-10
APPLICATION NUMBER: 60/088810
TING DATE: 1998-06-10
APPLICATION NUMBER: 60/088824 APPLICATION NUMBER: 60/065311
FILING DATE: 1997-11-13
APPLICATION NUMBER: 60/066770
FILING DATE: 1997-11-24
APPLICATION NUMBER: 60/075945 APPLICATION NUMBER: 60/088826 FILING DATE: 1998-06-10 APPLICATION NUMBER: 60/088858 APPLICATION NUMBER: 60/088734 FILING DATE: 1998-06-10 APPLICATION NUMBER: 60/088738 FILING DATE: 1998-06-04
APPLICATION NUMBER: 60/088026
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APPLICATION NUMBER: 60/088028
FILING DATE: 1998-06-04 APPLICATION NUMBER: 60/087106 FILING DATE: 1998-05-28 FILING DATE: 1998-03-20 APPLICATION NUMBER: 60/083322 FILING DATE: 1998-04-28 APPLICATION NUMBER: 60/078910 APPLICATION NUMBER: 60/065186 FILING DATE: 1997-11-12 FILING DATE: 1998-05-07 APPLICATION NUMBER: 60/084600 APPLICATION NUMBER: 60/088824 FILING DATE: 1998-06-10 APPLICATION NUMBER: 60/088742 APPLICATION NUMBER: 60/088655 APPLICATION NUMBER: FILING DATE: 1998-06 FILING DATE: 1998-06-09 FILING DATE: FILING DATE: мильек: 60/088738 1998-06-10 1998-05-28 1998-06-05 998-06-11 60/088217

APPLICATION NUMBER: 60/088876 FILING DATE: 1998-06-11 APPLICATION NUMBER: 60/089105

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RESULT 7
US-09-989-723-295
; Sequence 295, Application US/09989723
; Patent No. US20020072092A1
; Patent No. US200120072092A1
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APPLICANT: Zhang, Zemin
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2730P1C62
CURRENT APPLICATION NUMBER: US/09/989,723
CURRENT FILING DATE: 2001-11-19
PRIOR APPLICATION NUMBER: 60/049787
PRIOR APPLICATION NUMBER: 60/049787
PRIOR FILING DATE: 1997-06-16
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
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APPLICATION NUMBER: 60/
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Baker, Kevin P.
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Stewart, Timothy A.
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Godowski, Paul J.
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Pred. No. 1.5e+02;
0; Mismatches 3;
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R FILING DATE: 1998-06-19
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APPLICATION NUMBER: 60/ APPLICATION NUMBER: 60/ APPLICATION NUMBER: APPLICATION NUMBER: 60 FILING DATE: 1998-06-APPLICATION NUMBER: 60/ FILING DATE: 1998-06-18

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APPLICATION NUMBER: 60/089532 FILING DATE: 1998-06-17

APPLICATION NUMBER: 60/ FILING DATE: 1998-06-16 FILING DATE: 1998-06-16 APPLICATION NUMBER: FILING DATE: APPLICATION NUMBER: FILING DATE: 1998-06-

60/089514 60/089512

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APPLICATION NUMBER: 60/089538 FILING DATE: 1998-06-17

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APPLICATION NUMBER: 60/089801 FILING DATE: 1998-06-APPLICATION NUMBER: FILING DATE: 1998-06-17

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OR APPLICATION NUMBER: 60/090540
OR FILING DATE: 1998-06-24
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FILING DATE: 1998-06-19 APPLICATION NUMBER: 60/ FILING DATE: 1998-06-19

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TITLE OF INVENTION: Secreted and Transmembra
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2730P1C65
CURRENT APPLICATION NUMBER: US/09/989,727
CURRENT FILING DATE: 2001-11-19
PRIOR APPLICATION NUMBER: 60/049787
PRIOR FILING DATE: 1997-06-16
PRIOR FILING DATE: 1997-10-17
PRIOR PRIOR DATE: 1997-10-17
PRIOR FILING DATE: 1997-11-12
PRIOR APPLICATION NUMBER: 60/065116
PRIOR APPLICATION NUMBER: 60/065111
PRIOR FILING DATE: 1997-11-13
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PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/075945
PRIOR FILING DATE: 1998-02-25
PRIOR APPLICATION NUMBER: 60/078910
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/083322
PRIOR FILING DATE: 1998-04-28
PRIOR APPLICATION NUMBER: 60/084600
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PRIOR FILING DATE: 1997-11-24
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OR APPLICATION NUMBER: 60/091626
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Roy, Margaret Ann
Stewart, Timothy A.
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Kljavin, Ivar J.
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Godowski, Paul J.
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Williams,
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R FILING DATE: 1998-05.
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FILING DATE: 1998-06-25 APPLICATION NUMBER: FILING DATE:

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APPLICATION NUMBER:

FILING DATE: 1998-06-24 APPLICATION NUMBER: 60/090557 FILING DATE: 1998-06-24

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NUMBER: 60/091360: 1998-07-01

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APPLICATION NUMBER: 60/ FILING DATE: 1998-07-02

NUMBER: 60/091544

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1998-06-26

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R APPLICATION NUMBER: 60/089514 R FILING DATE: 1998-06-16 R APPLICATION NUMBER: 60/089532 R FILING DATE: 1998-06-17 R APPLICATION NUMBER: 60/089538 R FILING DATE: 1998-06-17 R APPLICATION NUMBER: 60/089598 R FILING DATE: 1998-06-17 R APPLICATION NUMBER: 60/089599 R FILING DATE: 1998-06-17 R APPLICATION NUMBER: 60/089599 R FILING DATE: 1998-06-17 R APPLICATION NUMBER: 60/089500 R FILING DATE: 1998-06-17 R APPLICATION NUMBER: 60/089653	R APPLICATION NUMBER: 60/087609 R APPLICATION NUMBER: 60/087609 R FILING DATE: 1998-06-02 R APPLICATION NUMBER: 60/087759 R FILING DATE: 1998-06-02 R APPLICATION NUMBER: 60/087827 R FILING DATE: 1998-06-03 R APPLICATION NUMBER: 60/088021 R FILING DATE: 1998-06-04 R APPLICATION NUMBER: 60/088026 R FILING DATE: 1998-06-04 R APPLICATION NUMBER: 60/088026 R FILING DATE: 1998-06-04 R APPLICATION NUMBER: 60/088028 R FILING DATE: 1998-06-04 R APPLICATION NUMBER: 60/088029 R FILING DATE: 1998-06-04 R APPLICATION NUMBER: 60/088030 R APPLICATION NUMBER: 60/088030 R FILING DATE: 1998-06-04 R APPLICATION NUMBER: 60/088030 R FILING DATE: 1998-06-04 R APPLICATION NUMBER: 60/088030 R FILING DATE: 1998-06-04 R APPLICATION NUMBER: 60/088030 R FILING DATE: 1998-06-05 R APPLICATION NUMBER: 60/088212 R FILING DATE: 1998-06-05 R APPLICATION NUMBER: 60/088212 R FILING DATE: 1998-06-05 R APPLICATION NUMBER: 60/088212 R APPLICATION NUMB	ν I Ο
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PRIOR

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APPLICANT: Zhang, Zemin
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2730P1C70
CURRENT APPLICATION NUMBER: US/09/989,731
CURRENT APPLICATION NUMBER: 60/049787
PRIOR APPLICATION NUMBER: 60/049787
PRIOR FILING DATE: 1997-06-16
PRIOR APPLICATION NUMBER: 60/062250
PRIOR APPLICATION NUMBER: 60/065250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/065186
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OR FILING DATE: 1997-11-24
OR APPLICATION NUMBER: 60/075945
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                                                              APPLICATION NUMBER: FILING DATE: 1998-05
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FILING DATE: 1998-07-07
APPLICATION NUMBER: 60/092182
FILING DATE: 1998-07-09
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Baker, Kevin P.
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Kljavin, Ivar J.
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Godowski, Paul J.
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Gerritsen, Mary E.
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Best Local Similarity

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RESULT 11
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TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2730p1C57
CURRENT APPLICATION NUMBER: US/09/989,732
CURRENT FILING DATE: 2001-11-19
CURRENT FILING DATE: 2001-11-19
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Baker, Kevin P.
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Gerritsen, Mary E.
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Stewart, Timothy A.
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OR APPLICATION NUMBER: 60/089514
OR FILING DATE: 1998-06-16
OR APPLICATION NUMBER: 60/089532
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OR FILING DATE: 1998-06-10
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OR APPLICATION NUMBER: 60/088858
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DR APPLICATION NUMBER: 60/089907
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DR APPLICATION NUMBER: 60/089908
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FILING DATE: 1998-06-12
APPLICATION NUMBER: 60/089440
FILING DATE: 1998-06-16
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FILING DATE: 1998-06-11
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RAPPLICATION NUMBER: 60/091360

DR FILING DATE: 1998-07-01

DR APPLICATION NUMBER: 60/091478

DR FILING DATE: 1998-07-02

DR APPLICATION NUMBER: 60/091544

DR FILING DATE: 1998-07-01

DR APPLICATION NUMBER: 60/091519

DR APPLICATION NUMBER: 60/091519

DR FILING DATE: 1998-07-02

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R APPLICATION NUMBER: 60-26

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APPLICATION NUMBER: 60/090431
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APPLICATION NUMBER: 60/090435
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FILING DATE: 1998-07-02
APPLICATION NUMBER: 60/091978
FILING DATE: 1998-07-07
APPLICATION NUMBER: 60/091982
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FILING DATE: 1998-06-25
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FILING DATE: 1998-06-24
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APPLICATION NUMBER: 60/090444
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FILING DATE: 1998-06-23
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Similarity 4; Conserv
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NUMBER: 60/092182
: 1998-07-09
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RESULT 12
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OR FILING DATE: 1997-11-24
OR APPLICATION NUMBER: 60/075945
OR FILING DATE: 1998-02-25
OR APPLICATION NUMBER: 60/078910
OR FILING DATE: 1998-03-20
OR APPLICATION NUMBER: 60/08322
OR FILING DATE: 1998-04-28
OR APPLICATION NUMBER: 60/087607
OR APPLICATION NUMBER: 60/087607
OR APPLICATION NUMBER: 60/087607
OR FILING DATE: 1998-05-28
OR APPLICATION NUMBER: 60/087607
OR FILING DATE: 1998-06-02
OR APPLICATION NUMBER: 60/087759
OR FILING DATE: 1998-06-02
OR APPLICATION NUMBER: 60/087827
OR APPLICATION NUMBER: 60/087827
OR APPLICATION NUMBER: 60/08021
OR APPLICATION NUMBER: 60/08021
OR APPLICATION NUMBER: 60/08025
OR FILING DATE: 1998-06-04
OR APPLICATION NUMBER: 60/08026
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APPLICATION NUMBER: 60/066770
FILING DATE: 1997-11-24
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Baker, Kevin P.
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Godowski, Paul J.
Grimaldi, J.Christopher
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Gerritsen, Mary E.
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art, Timothy A.
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                          OR APPLICATION NUMBER: 60/089514
OR ETLING DATE: 1998-06-16
OR APPLICATION NUMBER: 60/089532
OR FILING DATE: 1998-06-17
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OR FILING DATE: 1998-06-17
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OR FILING DATE: 1998-06-18
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DR FILING DATE: 1998-06-10
DR APPLICATION NUMBER: 60/088858
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DR APPLICATION NUMBER: 60/088212

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APPLICATION NUMBER: 60/089105
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APPLICATION NUMBER: 60/089440
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RESULT 13
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Best Local Similarity
Watches 4; Conserv
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Sequence 295, Application US/09990442
Patent No. US20020132252A1
GENERAL INFORMATION:
APPLICANT: Ashkenazi, Avi J.
APPLICANT: Baker, Kevin P.
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OR APPLICATION NUMBER: 60/090472
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Pred. No. 1.5e+02;
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APPLICANT: Zhang, Zemin
TITLE OF INVENTION: Secreted and Transmembra:
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2730P1C8
CURRENT APPLICATION NUMBER: US/09/990,442
CURRENT FILING DATE: 2001-11-14
PRIOR APPLICATION NUMBER: 60/06250
PRIOR FILING DATE: 1997-06-16
PRIOR FILING DATE: 1997-10-17
PRIOR FILING DATE: 1997-11-12
PRIOR APPLICATION NUMBER: 60/065186
PRIOR FILING DATE: 1997-11-12
PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-24
PRIOR FILING DATE: 1997-11-24
PRIOR APPLICATION NUMBER: 60/075945
PRIOR APPLICATION NUMBER: 60/075945
PRIOR APPLICATION NUMBER: 60/078910
PRIOR FILING DATE: 1998-03-20
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/083322
PRIOR APPLICATION NUMBER: 60/084600
PRIOR FILING DATE: 1998-05-07
DR APPLICATION NUMBER: 60/08
DR FILLING DATE: 1998-06-04
DR FILLING DATE: 1998-66-04
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Roy, Margaret Ann
Stewart, Timothy A.
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Gerritsen, Mary E
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                                           APPLICANT: Ashkenazi, Avi J.
APPLICANT: Baker, Kevin P.
APPLICANT: Botstein, David
APPLICANT: Bestein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara Napoleon
APPLICANT: Fong, Sherman
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Matches
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  Eaton, Dan L.
Ferrara, Napoleone
Fong, Sherman
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TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2730P1C17
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OR FILING DATE: 1998-06-04
OR APPLICATION NUMBER: 60/088025
OR FILING DATE: 1998-06-04
OR APPLICATION NUMBER: 60/088026
OR FILING DATE: 1998-06-04
OR APPLICATION NUMBER: 60/088028
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OR FILING DATE: 1998-04-28
OR APPLICATION NUMBER: 60/084600
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OR APPLICATION NUMBER: 60/087106
OR FILING DATE: 1998-05-28
OR APPLICATION NUMBER: 60/087607
OR APPLICATION NUMBER: 60/087607
OR FILING DATE: 1998-06-02
OR APPLICATION NUMBER: 60/087609
OR APPLICATION NUMBER: 60/087609
OR APPLICATION NUMBER: 60/087609
OR FILING DATE: 1998-06-02
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R FILING DATE: 1998-06-04
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R APPLICATION NUMBER: 60/08
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APPLICATION NUMBER: 60/087827
FILING DATE: 1998-06-03
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APPLICATION NUMBER: 60/
FILING DATE: 1998-06-04
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     FILING DATE: 1998-06-05
APPLICATION NUMBER: 60/088217
FILING DATE: 1998-06-05
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Williams, P. Mickey
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Godowski, Paul J.
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PR APPLICATION NUMBER: 60/090349

DR FILING DATE: 1998-06-23

DR APPLICATION NUMBER: 60/090355

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DR APPLICATION NUMBER: 60/090429

DR APPLICATION NUMBER: 60/090429

DR FILING DATE: 1998-06-24

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DR FILING DATE: 1998-06-24
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OR APPLICATION NUMBER: 60/089947
OR FILING DATE: 1998-06-19
DR APPLICATION NUMBER: 60/089948
DR FILING DATE: 1998-06-19
DR APPLICATION NUMBER: 60/089952
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OR APPLICATION NUMBER: 60/089514
OR FILING DATE: 1998-06-16
OR APPLICATION NUMBER: 60/089532
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OR APPLICATION NUMBER: 60/089538
OR FILING DATE: 1998-06-17
OR APPLICATION NUMBER: 60/089598
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IN FILING DATE: 1998-06-11
OR APPLICATION NUMBER: 60/089105
IN APPLICATION NUMBER: 60/089440
OR APPLICATION NUMBER: 60/089440
IN FILING DATE: 1998-06-16
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APPLICATION NUMBER: 60/090252
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APPLICATION NUMBER: 60/090254
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APPLICATION UNMBER: 60/089801
FILING DATE: 1998-06-18
APPLICATION NUMBER: 60/089907
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APPLICATION NUMBER: 60/088826
FILING DATE: 1998-06-10
APPLICATION NUMBER: 60/088858
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FILING DATE: 1998-06-10
APPLICATION NUMBER: 60/088810
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APPLICATION NUMBER: 60/089908
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      APPLICANT:
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DR APPLICATION NUMBER: 60/091633
DR FILING DATE: 1998-07-02
DR APPLICATION NUMBER: 60/091978
DR FILING DATE: 1998-07-07
DR APPLICATION NUMBER: 60/091982
DR FILING DATE: 1998-07-07
DR FILING DATE: 1998-07-07
OR APPLICATION NUMBER: 60/092182
OR FILING DATE: 1998-07-09
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OR APPLICATION NUMBER: 60/90862
OR FILING DATE: 1998-06-26
OR APPLICATION NUMBER: 60/090863
OR FILING DATE: 1998-06-26
OR APPLICATION NUMBER: 60/091360
OR FILING DATE: 1998-07-01
OR APPLICATION NUMBER: 60/091478
OR APPLICATION NUMBER: 60/091478
OR FILING DATE: 1998-07-01
OR APPLICATION NUMBER: 60/09154
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APPLICATION NUMBER: 60/090695
FILING DATE: 1998-06-25
APPLICATION NUMBER: 60/090696
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Similarity 57.1%;
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                                                                              Gerber, Hanspeter
Gerritsen, Mary E.
Goddard, Audrey
Godowski, Paul J.
Grimaldi, J.Christopher
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                                           Gurney, Austin L.
Kljavin, Ivar J.
                                                                                                                                                                                    Fong, Sherman
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Botstein, David
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                        Napier, Mary
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Pred. No. 1.5e
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CURRENT FILING DATE: 2001-11-14
PRIOR APPLICATION NUMBER: 60/049787
PRIOR FILING DATE: 1997-06-16
PRIOR APPLICATION NUMBER: 60/06250
PRIOR FILING DATE: 1997-10-17
PRIOR PRIOR DATE: 1997-11-12
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PRIOR PRIOR DATE: 1997-11-13
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PRIOR PRIOR DATE: 1997-11-24
PRIOR APPLICATION NUMBER: 60/066770
PRIOR PILING DATE: 1998-02-25
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APPLICANT: Zhang, Zemin
TITLE OF INVENTION: Secreted and
TITLE OF INVENTION: Acids Encodi
FILE REFERENCE: P2730P1C25
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OR FILING DATE: 1998-06-05
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OR FILING DATE: 1998-06-10
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PR FILING DATE: 1998-05-07
PR APPLICATION NUMBER: 60/08
PR FILING DATE: 1998-05-28
PR APPLICATION NUMBER: 60/08
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FILING DATE: 1998-03-20
APPLICATION NUMBER: 60/083322
FILING DATE: 1998-04-28
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FILING DATE: 1998-06-02
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Tumas, D
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OR FILING DATE: 1998-06-24
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OR APPLICATION NUMBER: 60/089907
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OR APPLICATION NUMBER: 60/089948
OR FILING DATE: 1998-06-19
OR APPLICATION NUMBER: 60/089952
OR FILING DATE: 1998-06-29
OR APPLICATION NUMBER: 60/090256
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DR FILING DATE: 1998-06-11
DR APPLICATION NUMBER: 60/089105
DR FILING DATE: 1998-06-12
DR APPLICATION NUMBER: 60/089440
DR FILING DATE: 1998-06-16
DR APPLICATION NUMBER: 60/089512
DR FILING DATE: 1998-06-16
DR APPLICATION NUMBER: 60/089514
DR APPLICATION NUMBER: 60/089532
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DR APPLICATION NUMBER: 60/089538
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PRIOR FILING DATE: 1998-07-02
PRIOR APPLICATION NUMBER: 60/091633
PRIOR FILING DATE: 1998-07-02
PRIOR APPLICATION NUMBER: 60/091978
PRIOR FILING DATE: 1998-07-07
PRIOR APPLICATION NUMBER: 60/091982
PRIOR FILING DATE: 1998-07-07
PRIOR APPLICATION NUMBER: 60/092182
PRIOR FILING DATE: 1998-07-09
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OR APPLICATION NUMBER: 60/090863
OR FILING DATE: 1998-07-01
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OR FILING DATE: 1998-07-02
OR APPLICATION NUMBER: 60/091544
OR FILING DATE: 1998-07-01
OR APPLICATION NUMBER: 60/091519
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APPLICATION NUMBER: 60/090696
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FILING DATE: 1998-06-25
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FILING DATE: 1998-06-25
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                                                     Similarity
                                    Conservative
                                                     76.9%;
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Pred.
                                      Mismatches
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Search completed: December 13, 2002, 08:46:14 Job time: 2.17791 secs

WAS PACE BANK WATER

Scoring table: Sequence: Title: Perfect score:

Database

Run on: OM protein -

sequence sequence

Sequence

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 2000000000
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US-08-458-499-3
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US-08-560-398-12
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US-08-560-398-3
US-09-655-538-34
US-09-661-468-34
US-09-665-538-37
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US-08-084-848A-3
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                     Query Match
Best Local S
            Matches
                                                                                                                REFERENCE/DOCKET NUMBER: 52
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)552-1311
TELEFAX: (619)552-0095
TELEX: 20 6566 PATLAW CGO
INFORMATION FOR SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Abogadie, Fe
APPLICANT: Hopkins, Chris E.
APPLICANT: Dykert, John
APPLICANT: TOTRES, JOSEP L.
TITLE OF INVENTION: CONCLOXINS I
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
                                                             TYPE: amino acid
TOPOLOGY: unknown
MOLECULE TYPE: pept
                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 19 amino acids
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NAME: Schumann, James J
                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
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CITY: Chicago
STATE: Illinios
COUNTRY: USA
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nes 5; Conserv
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135 South LaSalle Street, Suite
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PCT-US95-10203-85
PCT-US95-10203-85
PCT-US95-10203-85
US-08-331-394-11
US-08-446-915-11
US-08-446-915-13
US-08-250-858-13
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US-08-331-394-13
US-08-691-8148-13
US-08-691-8148-13
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US-08-458-499-3
GENERAL INFORMATION:
APPLICANT: Fischer et al.
TITLE OF INVENTION: 123 Human Secreted Proteins
FILE REFERENCE: PZ010P1
CURRENT APPLICATION NUMBER: US/09/227,357
CURRENT FILING DATE: 1999-01-08
                                                                                          Sequence 154, Application US/09227357 Patent No. 6342581
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Best Local !
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FILING DATE: 02-UN-1995
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/084,84
FILING DATE: June 29, 1993
ATTORNEY_AGENT INFORMATION:
NAME: Schumann, James J.
REGISTRATION NUMBER: 20856
REFERENCE/DOCKET NUMBER: 5251
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)552-1311
                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: (619)552-0095
TELEX: 20 6566 PATLAW CGO
INFORMATION FOR SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
LENGTH: 19 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/458,499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: Fitch, Ev
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Hopkins, Chris E
APPLICANT: Dykert, John
APPLICANT: Torres, Josep L.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                               Local Similarity
nes 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET:
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135 South LaSalle Street, Suite 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       USA
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71.48;
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Pred. No.
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                                                                                                                                                                                                                                                             DB 1;
37;
                                                                                                                                                                                                                                                                          Length 19;
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EARLIER
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
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EARLIER APPLICATION NUMBER: 60//
EARLIER FILING DATE: 1997-09-12
NUMBER OF SEQ ID NOS: 672
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 154 EARLIER LENGTH: APPLICATION NUMBER: FILING DATE: 1997-0 FILING DATE: 1997-08-18
APPLICATION NUMBER: 60/
FILING DATE: 1997-09-12
APPLICATION NUMBER: 60/ APPLICATION NUMBER: 60 APPLICATION NUMBER: 60/0 FILING DATE: 1997-08-18 FILING DATE: 1997-08-18 APPLICATION NUMBER: 60/055,953 FILING DATE: 1997-08-18 APPLICATION NUMBER: 60/055,722 FILING DATE: 1997-08-18 APPLICATION NUMBER: 60/055,723 FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/052,795
FILING DATE: 1997-07-08
APPLICATION NUMBER: 60/051,919
FILING DATE: 1997-07-08 FILING DATE: 1997-09-12 FILING DATE: APPLICATION NUMBER: 60/ FILING DATE: 1997-08-18 APPLICATION NUMBER: 60/ FILING DATE: 1997-08-18 APPLICATION NUMBER: 60/055,950 FILING DATE: 1997-08-18 APPLICATION NUMBER: 60/ APPLICATION NUMBER: 60/ FILING DATE: 1997-07-08 APPLICATION NUMBER: 60/051,932 FILING DATE: 1997-07-08 APPLICATION NUMBER: FILING DATE: 1997-08-18 APPLICATION NUMBER: FILING DATE: APPLICATION NUMBER: FILING DATE: 1997-08-18 APPLICATION NUMBER: 60/052,733 APPLICATION NUMBER: 60/051,920 FILING DATE: 1997-07-08 APPLICATION NUMBER: 60/051,918 APPLICATION NUMBER: 60/051,930 FILING DATE: 1997-07-08 APPLICATION NUMBER: 60/051,931 FILING DATE: 1997-07-08 APPLICATION NUMBER: 60/052,732 FILING DATE: 1997-07-08 APPLICATION NUMBER: 60/051,925 FILING DATE: 1997-07-08 APPLICATION NUMBER: 60/051,926 FILING DATE: 1997-07-08 APPLICATION NUMBER: PCT/US98/13684 FILING DATE: 1998-07-07 FILING DATE: 1997-07-08 APPLICATION NUMBER: FILING DATE: 1997-07-08 APPLICATION NUMBER: 60/052,803 APPLICATION NUMBER: 60/051,929 FILING DATE: 1997-07-08 APPLICATION NUMBER: 60/052,793 FILING DATE: 1997-07-08 FILING DATE: 1997-07-08 1997-09-12 1997-08-18 1997-08-18 60/058,661 60/058,660 60/058,664 60/058,785 60/055,954 60/055,984 60/055,684 60/056,360 60/055,964 60/055,947 60/055,949 60/055,948 60/051,928 60/051,916

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; NAME/KEY: SITE
; LOCATION: (151)
; OTHER INFORMATION:
US-09-227-357-154
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                                                            US-08-560-398-2
                                                                           RESULT 5
                                                                                                                                                                                                                                                                                                                                   NAME: Bastian, Kevin L.
REGISTRATION NUMBER: 34,774
REFERENCE, DOCKET NUMBER: 0230
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEPEAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 12:
               Sequence 2, Application US/08560398 Patent No. 5907082 GENERAL INFORMATION:
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Matches
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Patent No. 5
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
                                                                                                                                                                                                                                                         TYPE: amino acids
TOPOLOGY: lin-
OLECUID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: O'Neill, Sharman APPLICANT: Nadeau, Jeanette TITLE OF INVENTION: Ovule-S
                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
APPLICANT: O'Neill, Sharman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
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                                                                                                                         105 NATCPNC 111
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nes 4; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 17-NOV-1995 CLASSIFICATION: 435
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
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5907082
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57.1%;
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Pred. No.
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                                                                                                                                                                                4.9e+02;
ches 3;
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: (202) 293-70 (202) 293-7860

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-820-170A-34
                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 34, Application US/08820170A Patent No. 5831058
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best
                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: TSULOMU, FUJIWARA
APPLICANT: Takeshi, WATANABE
APPLICANT: Masato, HORIE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: FLOPPY disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTION DATA:
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/08/560,398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: (415) 576-03
INFORMATION FOR SEQ ID NO:
                                                                                    COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-TOS/MS-DOS SOTTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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NAME: Bastian, Kevin L.
REGISTRATION NUMBER: 34,774
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ADDRESSEE: Townsend and Townsend and Crew LLP
FILING DATE:
CLASSIFICATION: 536
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 293-7060
                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: Sughrue, Mion,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION:
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mvpE: amino acid
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CLASSIFICATION: 435
                                                                                                                                                                                              COUNTRY: United States ZIP: 20037-3202
                                                                                                                                                                                                                                            STREET: 2100 Peni
CITY: Washington
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                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4 NXXCPXC 10
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                                                                                                                                                                                                                                                                  2100 Pennsylvania Avenue, N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  768 amino acids
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(415) 576-0300
'OR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                      Toyomasa, Karren
Toyomasa, Karren
TOYOMATON: HUMAN GENE
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57.1%;
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                                                                      US/08/820,170A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 30;
Pred. No.
                                                                                                                                                                                                                                                                                   Zinn, Macpeak & Seas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                         Version #1.30
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GENERAL

APPLICANT: Takeshi, n.

APPLICANT: Masato, HORIE

APPLICANT: Masato, HORIE

APPLICANT: TOYOMASA, KATAGIRI

TITLE OF INVENTION: HUMAN GENE

NUMBER OF SEQUENCES: 42

CORRESPONDENCE ADDRESS:

ADDRESSEE: Sughrue, Mion, Zinn, Macpeak & Seas

""BEET: 2100 Pennsylvania Avenue, N.W.
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                                                                                                                                                                                                                           ; LENGTH: 810 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-055-699-34
                                    US-09-273-565-34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 7
US-09-055-699-34
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                                                   RESULT 8
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                                                                                                                                                                                                                                                                       FILING DATE:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 293-7860
TELEFAX: (202) 293-7860
TELEX: 6491103
INFORMATION FOR SEQ ID NO: 34:
SEQUENCE CHARACTERISTICS:
LENGTH: 810 amino acids
TYPE: amino acid
Sequence 34, Applic
Patent No. 6166190
                                                                                                                                                               Matches
                                                                                                                                                                                             Query Match
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INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
LENGTH: 810 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: United States
ZIP: 20037-3202
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/820,170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE: protein
                                                                                                 224 NHTCPTC 230
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                               Local Similarity les 4; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/09/055,699
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                                                                                                                               4 NXXCPXC 10
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                  Application US/09273565A
                                                                                                                                                               Conservative
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                                                                                                                                                                              76.9%;
57.1%;
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57.1%;
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Pred. No. 5.4e+02;
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                                                                                                                                                                                             Length 810;
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-273-565-34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/273,565A
CURRENT FILING DATE: 1999-03-22
EARLIER APPLICATION NUMBER: 09/055,699
EARLIER APPLICATION NUMBER: 09/055,699
EARLIER APPLICATION NUMBER: 08/820,170
EARLIER APPLICATION NUMBER: 08/820,170
EARLIER APPLICATION NUMBER: JP 63410/1996
EARLIER FILING DATE: 1997-03-19
EARLIER FILING DATE: 1996-03-19
EARLIER APPLICATION NUMBER: JP 63163/1997
EARLIER FILING DATE: 1997-03-05
NUMBER OF SEQ ID NOS: 95
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                                                               Query Match
Best Local S
Matches 4
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Matches 4; Conserv
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Patent No. 6333404
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: FUJIWARA, TSUTOMU
APPLICANT: WATANABB, TAKESHI
APPLICANT: HORIE, MASATO
TITLE OF INVENTION: AN ISOLATED NUCLEIC ACID MOLECULE ENCODING HUMAN
TITLE OF INVENTION: SKELETAL MUSCLE-SPECIFIC UBIQUITIN-CONJUGATING ENZYME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: FUJIWARA, TSUTOMU
APPLICANT: WATANABE, TAKESHI
APPLICANT: WATANABE, TAKESHI
APPLICANT: HORIE, MASATO
TITLE OF INVENTION: AN ISOLATED NUCLEIC ACID MOLECULE ENCODING HUMAN
TITLE OF INVENTION: SKELETAL MUSCLE-SPECIFIC UBIQUITIN-CONJUGATING ENZYME
FILE REFERENCE: Q-53599
224 NHTCPTC 230
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                             4 NXXCPXC 10
                                                              Similarity 4; Conserv
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                                                                 Conservative
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57.1%;
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                                                               Score 30; DB 4;
Pred. No. 5.4e+02;
0; Mismatches 3
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Pred. No. 5.4e+02;
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                                                                                               Length 810;
                                                                 Indels
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US-08-820-170A-37
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US-09-661-468-34
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APPLICANT: WATANABE, TAKES
APPLICANT: HORIE, MASATO
TITLE OF INVENTION: AN ISO
TITLE OF INVENTION: SKELET
FILE REFERENCE: Q-53599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent No. 5831058
GENERAL INFORMATION:
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Patent No. 6376189
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PRIOR FILING DATE: 1997-03-19
PRIOR APPLICATION NUMBER: JP 0
PRIOR FILING DATE: 1996-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/661,468
CURRENT FILING DATE: 2000-09-13
PRIOR APPLICATION NUMBER: 09/055,699
PRIOR FILING DATE: 1998-04-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: JP (PRIOR FILING DATE: 1997-03-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS:
             TELEFAX: (202) 293-7860
TELEX: 6491103
INFORMATION FOR SEQ ID NO: 37:
                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 42
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sughrue, Mion, Zinn, Macpeak & Seas
STREET: 2100 Pennsylvania Avenue, N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Tsutomu, FUJIWARA
APPLICANT: Takeshi, WATANABE
APPLICANT: Masato, HORIE
                                                                                       APPLICATION NUMBER: US/08/820,170A FILING DATE: CLASSIFICATION: 536
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION:
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SEQUENCE CHARACTERISTICS:
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nes 4; Conserv
                                                   TELEPHONE: (202) 293-700 TELEFAX: (202) 293-7860
                                                                                                                                                                                                                                                                                       ZIP: 20037-3202
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57.1%;
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Pred. No.
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ches 3;
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US-09-055-699-37
                                                                                        RESULT 13
US-09-273-565-37
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GENERAL INFORMATION:
APPLICANT: FUJIWARA
APPLICANT: WATMAABE, TAKESHI
APPLICANT: HORIE, MASATO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 37, Applicat Patent No. 6005088 GENERAL INFORMATION:
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                                                          Sequence 37, Appli
Patent No. 6166190
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Best Local
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                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ. ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 816 amino acid
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APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOCTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 42
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sughrue, Mion, Zinn, Macpeak & Seas
STREET: 2100 Pennsylvania Avenue, N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Washington STATE: D.C.
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nes 4; Conservative
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TELEX: 6491103
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
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                                                                                                                                                                                                         Local Similarity es 4; Conserv
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                                                                        Application US/09273565A
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Masato, HORIE
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57.1%;
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57.18;
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Pred. No. 5.4e+02;
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ches 3;
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; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 37
; LENGTH: 816
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-273-565-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: SKELETAL MUSCLE-SPECIFIC UBIQUITIN-CONJUGATING ENZYME
FILE OF INVENTION: SKELETAL MUSCLE-SPECIFIC UBIQUITIN-CONJUGATING ENZYME
FILE REFERENCE: Q-53599
CURRENT APPLICATION NUMBER: US/09/565,538
CURRENT FILING DATE: 2000-05-05
PRIOR APPLICATION NUMBER: 09/273,565
PRIOR FILING DATE: 1999-03-22
PRIOR FILING DATE: 1999-03-22
PRIOR APPLICATION NUMBER: 09/055,699
PRIOR APPLICATION NUMBER: 09/055,699
PRIOR FILING DATE: 1997-03-19
PRIOR APPLICATION NUMBER: 09/055,699
PRIOR APPLICATION NUMBER: JP 63410/1996
PRIOR FILING DATE: 1997-03-05
NUMBER: DF 69163/1997
PRIOR FILING DATE: 1997-03-05
NUMBER: DF 69163/1997
PRIOR FILING DATE: 1997-03-05
RESULT 15
US-09-661-468-37
; Sequence 37, Application US/09661468
                                                                                                                                      В
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-565-538-37
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CURRENT APPLICATION NUMBER: US/09/273,565A
CURRENT FILING DATE: 1999-03-22
EARLIER APPLICATION NUMBER: 09/055,699
EARLIER FILING DATE: 1998-04-07
EARLIER APPLICATION NUMBER: 08/820,170
EARLIER APPLICATION NUMBER: US/09/05/1996
EARLIER FILING DATE: 1997-03-19
EARLIER FILING DATE: 1997-03-19
                                                                                                                                                                                                                                 Matches
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
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APPLICANT: WATANABE, TAKESHI
APPLICANT: HORIE, MASATO
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EARLIER FILING DATE: 1997-03-05
NUMBER OF SEQ ID NOS: 95
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4; Conservative
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57.1%;
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Pred. No. 5.4e+02;
0; Mismatches 3;
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Search completed: December 13, 2002, 08:45:19 Job time : 3.69325 \ \text{secs}
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                                                                                                                                                                                                                                  ; ORGANISM: Homo sapiens US-09-661-468-37
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; SEQ ID NO 37
; LENGTH: 816
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Best Local
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APPLICANT:
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CURRENT FILING DATE: 2000-09-13
PRIOR APPLICATION NUMBER: 09/055,699
PRIOR FILING DATE: 1998-04-07
PRIOR APPLICATION NUMBER: 08/820,170
PRIOR APPLICATION NUMBER: JP 63410/1996
PRIOR APPLICATION NUMBER: JP 63410/1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: HORIE, MASATO
TITLE OF INVENTION: AN ISOLATED NUCLEIC ACID MOLECULE ENCODING HUMAN
TITLE OF INVENTION: SKELETAL MUSCLE-SPECIFIC UBIQUITIN-CONJUGATING ENZYME
FILE REFERENCE: Q-53599
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PRIOR APPLICATION NUMBER: JP (
PRIOR FILING DATE: 1997-03-05
NUMBER OF SEQ ID NOS: 95
                                                                            225 NRTCPTC 231
                                                                                                                                                       Local Similarity 57.1 les 4; Conservative
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WATANABE, TAKESHI
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1996-03-19
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Maximum DB seq length: 2000000000
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                                            /SIDS2/gcgdata/geneseq/geneseqp-emb1/AA2000.DAT:
/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA2001.DAT:
/SIDS2/gcgdata/geneseq/geneseqp-embl/AA2002.DAT:*
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344.760 Million cell updates/sec
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

10	9	80	7	6	ъ		ω	2	1	Result No.
30	30	30	30	30	30	30	30	30	31	Score
76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	79.5	Query Match
201	200	199	179	147	136	130	118	84	80	Query Match Length DB
22	23	22	21	22	22	20	22	21	23	1
AAU15883	ABB72391	AAU16338	AAG36278	AAU16336	AAB87620	AAY36293	AAM80051	AAG03183	ABP01599	ID
 Human novel secret	Murine protein iso	Human novel secret	Arabidopsis thalia	Human novel secret	Bovine mammary tis	Human secreted pro	Human protein SEQ	Human secreted pro	Human ORFX protein	Description

45	44	43	42	41	40	39	38	37	36	35	34	ယ	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11
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646	624	582	495	473	452	419	406	381	349	343	342	340	338	337	321	299	296	290	290	271	271	266	262	261	260	254	242	242	237	237	237	237	237	231
21	22	22	21	21	22	21	23	21	21	21	21	21	21	21	21	21	21	21	21	21	21	22	22	22	21	23	22	22	22	22	21	21	20	22
AAG31082	AAB92857	ABB61452	AAG35458	AAG35459	AAB92587	AAG35460	AAU93092	AAG09609	AAG31330	AAG13256	AAG31331	AAG28881	AAG09610	AAG09611	AAG31332	AAG13257	AAG28882	AAY52379	AAG36276	AAG28883	AAG13258	AAU15881	AAG73661	\mathbf{L}	AAG36277	ABB79353	AAM39926	AAM79067	AAB65244	AAU29134	AAY66721	AAY87321	265	AAM25880
Arabidopsis thalia	Human protein sequ	3	Arabidopsis thalia	Arabidopsis thalia	Human protein sequ	Arabidopsis thalia	Arabidopsis transc	Arabidopsis thalia	S	S	Arabidopsis thalia	is thal	Arabidopsis thalia	Arabidopsis thalia	Arabidopsis thalia						Arabidopsis thalia		Human colon cancer	æ	dopsis	Human ovary specif	polypept		Human PRO511 (UNQ5	Human PRO polypept	ane-bour	signal p	secreted	Human protein sequ

ALIGNMENTS

ABP01599 RESULT 1 Human; open reading frame; ORFX; gene therapy; cancer; cirrhosis; hyperproliferative disorder; psoriasis; benign tumour; haemorrhage; degenerative disorder; osteoarthritis; neurodegenerative disorder; cardiovascular disease; diabetes mellitus; systemic lupus erythematosus; hypertension; hypothyroidism; cholesterol ester storage disease; immune deficiency; immune disorder; infectious disease; autoimmune disorder; rheumatoid arthritis; autoimmune thyroiditis; myasthenia gravis. ABP01599; ABP01599 standard; Protein; 80 AA. Shimkets RA, 30-MAY-2000; 2000US-206132P. 29-AUG-2000; 2000US-228716P. WO200192523-A2 Human ORFX protein sequence SEQ ID NO:3180 24-JUN-2002 (first entry) (CURA-) CURAGEN CORP 29-MAY-2001; 2001WO-US10836 06-DEC-2001. Homo sapiens. Leach MD;

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RESULT 2
AAGO3183
ID AAGC
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   Dumas Milne Edwards J,
                                                                                                                                                                                21-FEB-2000;
                                                                                                                                                                                                                                          06-SEP-2000
                                                                                                                                                                                                                                                                                                     EP1033401-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human secreted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wlpo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           useful for treating burns, incisions, ulcers, for treating osteopor bone degenerative disorders, or periodontal disease, and for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues and conditions resulting from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   treating or preventing a pathology associated with an ORFX-associated disorder in humans, and in the manufacture of a medicament for treating syndrome associated with ORFX-associated disorder. ORFX polynucleotide
                                                          (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAG03183 standard; Protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel human polypeptides and polynucleotides useful for diagnosing, preventing and treating cardiovascular disease, neurodegenerative, hyperproliferative disorders and autoimmune disorders
                                                                                                                        26-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human;
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DB; ABN17351.
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4; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                      EST;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    80 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID 3180;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                   2000EP-0200610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10
                                                                                                                                                                                                                                                                                                                                                                                                                           chromosome
                                                                                                                        99US-0122487
                                                                                                                                                                                                                                                                                                                                                                                                                                                      expressed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein, SEQ ID NO: 7264.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              79.5%;
   Duclert A,
                                                                                                                                                                                                                                                                                                                                                                                                                    sequence tag; secreted protein; cDNA isolation; mapping. \dot{}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1037pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 31; DB 23;
Pred. No. 2.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
   Giordano
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          are useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          be used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (see Table
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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RESULT 3
AAM80051
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                               03-FEB-2000;
27-APR-2000;
20-JUN-2000;
19-JUL-2000;
01-SEP-2000;
15-SEP-2000;
20-OCT-2000;
          Tang YT,
Zhao QA,
Xue AJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          were prepared from mRNAs encoding secreted proteins. The 5' ESTS were prepared from total human RNAs or polyA+ RNAs derived from 30 different tissues. EST sequences usually correspond mainly to the 3' untranslated region (UTR) of the mRNA because they are often obtained from oligo-dT primed cDNA libraries. Such ESTs are not well suited for isolating cDNA sequences derived from the 5' ends of mRNAs and even in those cases where longer cDNA sequences have been obtained, the full 5' UTR is rarely included. 5' ESTs are derived from mRNAs with intact 5' ends and can therefore be used to obtain full length cDNAs and genomic cohromosome mapping procedures. They are used to obtain upstream requires and soorest to vectors.
                                                                                                                                                                                                                                                                                                     Human; cytokine; cell proliferation; cell differentiation; gene therapy; vaccine; peptide therapy; stem cell growth factor; haematopolesis; tissue growth factor; immunomodulatory; cancer; leukaemia; nervous system disorder; arthritis; inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New nucleic acid that is a 5' expressed sequence tag (5' EST) for obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and for diagnostic, forensic, gene therapy and chromosome mapping procedures
                                                                                                                                                                                                    05-FEB-2001;
                                                                                                                                                                                                                             09-AUG-2001
                                                                                                                                                                                                                                                      WO200157190-A2
                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                 Human protein SEQ ID NO 3697.
                                                                                                                                                                                                                                                                                                                                                                                             06-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                    AAM80051;
                                                                                                                                                                                                                                                                                                                                                                                                                                             AAM80051 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 13; SEQ ID 7264; 71pp + CD-ROM; English
                                                            (HYSE-)
                                                                                      30-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  regulatory sequences and to design expression and secretion vectors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
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                                                             HYSEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
          Liu C,
Wang D,
Yang Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            84
                                                                                   2000US-0560875.
2000US-0598075.
2000US-0620325.
2000US-0654936.
2000US-0663561.
2000US-0693325.
2000US-0728422.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                    2001WO-US04098
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                                                                                                                                                                           2000US-0496914
                                                            INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AA;
          Drmanac RT, Asundi V,
Wang J, Zhang J, Ren
Wejhrman T, Goodrich R;
                                                                                                                                                                                                                                                                                                                                                                                                                                            Protein; 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      76.9%;
57.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a polypeptide encoded by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 30; DB Pred. No. 3.26 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 21,
3.2e+02;
3;
                      Zhou
F, C
                                  ָס'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 84
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Wang
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RESULT 4 |
AAY36293
ID AAY3629
XX AAY3629
XX |
AC AAY3629
XX |
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                            18-DEC-1997;
18-DEC-1997;
18-DEC-1997;
18-DEC-1997;
18-DEC-1997;
18-DEC-1997;
18-DEC-1997;
19-DEC-1997;
19-DEC-1997;
19-DEC-1997;
19-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; secreted protein; cancer; tumour; developmental deficiency; blood disorder; immune system disorder; inflammation; autoimmune disease; allergy; Alzheimer's disease; cognitive disorder; autoimmune.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to polynucleotides (AAK51456-AAK53435) and the encoded polypeptides (AAM/8323-AAM83302) that exhibit activity elating to cytokine, cell proliferation or cell differentiation or which may induce production of other cytokines in other cell populations. The polynucleotides and polypeptides are useful in gene therapy, vaccines or peptide therapy. The polypeptides have various cytokine-like activities, e.g. stem cell growth factor activity, haematopoiesis regulating activity, tissue growth factor activity, haematopoiesis regulating activity, this provides and may be useful in the diagnosis and/or treatment of cancer, leukaemia, nervous system disorders, arthritis and inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-476283/51
N-PSDB; AAK53184.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         schizophrenia; arthritis; asthma; psoriasis; sepsis; skin disorder; atherosclerosis; diabetes; cardiovascular disorder; kidney disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human secreted protein encoded by gene 70 \, .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAY36293 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 20; Page 414; 6221pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                    17-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            W09931117-A1.
                                                                                                                                                                                                                                                                                                                                    18-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                              19-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
nes 4; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4 NXXCPXC 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      118 AA;
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                                                     97US-0070923.
97US-0068169.
97US-0068365.
97US-0068367.
                                                                                                                                                                                                                      97US-0068053.
97US-0068054.
                                                                                                                                                                                                                                                                                                     970S-0068006.
970S-0068007.
                                                                                                                                                                   97US-0068064
                                                                                                                                                                                                97us-0068057
                                                                                                                                                                                                                                                                               97US-0068008
                                                                                                                                                                                                                                                                                                                                                           97US-0068369
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Protein; 130 AA
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57.1%;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.1e+02;
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ARBSULT 5
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Best Local
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Ni J, Rosen
Yu G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     polypeptides are useful for preventing, treating or ameliorating medical conditions, e.g. by protein or gene therapy. Also pathological conditions can be diagnosed by determining the amount of the new polypeptides in a sample or by determining the presence of mutations in the new genes. Specific uses are described for each of the 10 genes, based on which tissues they are most highly expressed in, and include developing products for the diagnosis or treatment of cancer, tumours, developmental abnormalities and foetal deficiencies, blood disorders, diseases of the immune system, autoimmune diseases, inflammation, allergies, Alzheimer's and cognitive disorders, schizophrenia, arthritis, asthma, psoriasis, sepsis, skin disorders, atherosclerosis, diabetes, cardiovascular disorders, kidney disorders, atherosclerosis, diabetes, cardiovascular of the polypeptides are also useful for identifying their binding partners. The sequences given in AAX97907 to AAX97915 and AAY36223 are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAX97916 to AAX98029 represent 110 isolated human secreted protein genes. AAY36224 to AAY36727 represent the secreted proteins encode the 110 human genes. The genes and their corresponding secreted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 11; Page 383; 537pp; English.
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                                                                                  Havukkala IJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bovine; mammary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bovine mammary tissue derived protein #11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-MAY-2001
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                                                                                                                                                                                                                    23-AUG-1999;
                                                                                                                                                                                                                                                                          23-AUG-2000; 2000WO-NZ00166
                                                                                                                                                                                                                                                                                                                                                                                      WO200114553-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                            Bos taurus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAB87620;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAB87620 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    used in the exemplification of the present invention.
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                            WPI; 2001-226619/23
                                                                                                                                  (GENE-) GENESIS RES
(NZPA-) NEW ZEALAND
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              130 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Duan RD,
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n CA, Ruben
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                                                                               Gleen
                                                                                                                                                                                                                    99US-0150330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gland; cancer;
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                                                                                                                                     & DEV CORP LTD.
PASTORAL AGRIC
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57.18;
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JM, Janat
                                                                                  Grigor MR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       136
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Shi Y, Soppe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
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Pred. No. 4.4e+02;
0; Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tumour; angiogenesis
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, Soppet DR, W
                                                                                                                                     RES INST LTD
                                                                                  Molenaar AJ;
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07-JUN-2000

07-JUN-2000

07-JUL-2000

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14-JUL-2000

14-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                          neuroprotective; antibacterial; vasotropic; cerebroprotective; nootropic; neuroprotective; antibacterial; virucide; fungicide; opthalmalogical; vulnerary; secreted protein; rheumatoid arthritis; hyperproliferative disorder; cardiovascular disorder; cardiovascular disorder; cardiovascular disorder; cerebrovascular disorder; cerebral ischaemia; angiogenesis: corneal infection; wound heartiselement's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention relates to proteins derived from bovine mammary gland cells. The invention is useful for stimulating bovine mammary gland cell growth and function, inhibiting the growth of various mammary gland cancer cells, inhibiting angiogenesis and vascularization of tumours, or modulating the growth of blood vessels in a mammal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New polypeptides and are expressed in bovi mammary gland growth producing cells -
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2000US-0214886.

2000US-0215135.

2000US-0216647.

2000US-0216880.

2000US-0217487.

2000US-0217496.

2000US-0218290.

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2000US-021964.

2000US-022964.

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2000US-0224518.
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2000US-0199874
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2000US-0198123
2000US-0205515
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and polynucleotides encoding the polypeptides, which bovine mammary gland tissue, useful for stimulating owth or function, or inducing differentiation of milk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           76.9%;
57.1%;
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Pred. No. 4.56
0; Mismatches
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4.5e+02;
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2000US-0229513
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2000US-0231241
2000US-0231414
2000US-0231414
2000US-0232080
2000US-0232080
2000US-0232081
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2000US-0225757.
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2000US-0226681.
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2000US-022709.
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2000US-0229243.
2000US-0229343.
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CC The invention relates to isolated nucleic acid molecules and their CC encoded secreted proteins. The nucleic acids and proteins are used to CC prevent, treat or ameliorate a medical condition in e.g. humans, mice, CC rabbits, goats, horses, cats, dogs, chickens or sheep. They CC are also used in diagnosing a pathological condition or susceptibility CC to a pathological condition. Antibodies to the proteins can also be used in alleviating symptoms associated with the disorders and in CC diagnostic immunoassays e.g. radioimmunoassays or enzyme linked include autoimmune diseases e.g. rheumatoid arthritis, continuous collar disorders e.g. cardiac arrest, cerebrovascular disorders e.g. cardiac arrest, or province e.g. cardiac arrest and in collar disorders e.g. corneal infection, and many other collar disorders e.g. corneal infection.
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17-NOV-2000;
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17-NOV-2000;
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17-NOV-2000;
17-NOV-2000;
17-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                New nucleic acid molecules encoding 461 human secreted proteins for diagnosing, preventing, treating or ameliorating medical conditions used as food additives or preservatives -
                                                                                                                                                                                                                                                                                                               Claim 11; SEQ ID No 1289; 980pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (HUMA-) HUMAN GENOME
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DB; AAS26323.
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2000US-0251479.
2000US-0251856.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           be used to aid wound healing and epithelial cell proliferation, to prevent skin aging due to sunburn, to maintain organs before transplantation, for supporting cell culture of primary tissues, to regenerate tissues and in chemotaxis. The polypeptides can also be as a food additive or preservative to increase or decrease storage capabilities, fat content, lipid, protein, carbohydrate, vitamins, minerals, cofactors and other nutritional components. The present sequence represents a novel secreted protein of the invention.
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99US-0128234

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Pred. No. 4.8e+02;
""matches 3;
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99US-0161920. 99US-0161992. 99US-0161993.	90S-016135 90S-016136 90S-016136	908-016140	90S-016098	9US-016098	905-016081	9US-016077	9US-016076	9US-016074	9US-015963	90S-015963	9US-015933	905-015929 905-015939	908-015929	9US-015836	90S-015823	905-015786	9US-015775	9US-015659	9us-015645	9US-015548	9US-015513	905-015403	9US-015375 9US-015401	9US-015307	90S-015193	9US-015143	9US-015108	9US-015106	9US-015088	9US-014993	9US-U14990 9US-014990	9US-014972	9US-014942 9US-014972	9US-014917	908-014868	9US-014856	9US-014831	9US-014817	9US-014749	9US-014741	9US-014726	90S-014730	905-014720

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16-MAR-2000

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57.1%;
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2000US-0229513
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2000US-0230438
2000US-0231243
2000US-0231241
2000US-0231414
2000US-0231414
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2000US-0232981
2000US-0232981
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2000US-0232398
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2000US-0232390
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2000US-0233063
2000US-02334274
2000US-02344274
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2000US-0228924.
2000US-0229287.
2000US-0229343.
2000US-0229344.
2000US-0229345.
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17-NOV-2000;
17-NOV-2000;
                                                                                                               e.g. cerebral ischaemia, angiogenesis, nervous system disorders e.g. Alzhelmer's disease, infections caused by bacteria, viruses and fung and ocular disorders e.g. corneal infection, and many other disorders listed in the specification. The polypeptides can also be used to aid wound healing and epithelial cell proliferation, to prevent skin aging due to sunburn, to maintain organs before transplantation, for supporting cell culture of primary tissues, to regenerate tissues and in chemotaxis. The polypeptides can also be used to additive or preservative to increase or decrease storage
                                                                                                                                                                                                                                                        encoded secreted proteins. The nucleic acids and proteins are used to prevent, treat or ameliorate a medical condition in e.g. humans, mice, rabbits, goats, horses, cats, dogs, chickens or sheep. They are also used in diagnosing a pathological condition or susceptibility to a pathological condition. Antibodies to the proteins can also be used in alleviating symptoms associated with the disorders and in diagnostic immunoassays e.g. radioimmunoassays or enzyme linked inmunosorbant assays (ELISA). Disorders which are diagnosed or treated include autoimmune diseases e.g. rheumatoid arthritis, hyperproliferative disorders e.g. cardiac arrest, cerebrovascular disorders e.g. cardiac arrest, cerebrovascular disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New nucleic acid molecules encoding 461 human secreted proteins for diagnosing, preventing, treating or ameliorating medical conditions used as food additives or preservatives -
                                                                     sequence represents
                                                                                                     capabilities, fat content,
                                                                                                                                                                                                                                                                                                                                                                                                                                            The
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                       Local
                                                                                                                                                                                                                                                                                                                                                                                                                                        invention relates to isolated nucleic acid molecules and their
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CA,
    Similarity 4; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HUMAN GENOME
                                                                  ies, fat content, lipid, protein, carbohydrate, vitamins, cofactors and other nutritional components. The present represents a novel secreted protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID No 1291; 980pp; English.
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        Conservative
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2000US-0256719.
2000US-0251479.
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2000US-0254097.
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2000US-0251868.
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2000US-0249217.
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                     76.9%;
57.1%;
    Score 30; DB Pred. No. 5.9e 0; Mismatches
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DB 22,
5.9e+02,
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                                                                                                                                                                                                                                                      The present invention provides the protein and coding sequences of cDNAs isolated from human, murine and rat skin cell libraries. The sequences can be used in the development of therapeutic agents useful in the transpection of skin diseases, including skin wounds, cancer, growth defects, developmental defects and inflammatory diseases. The proteins have important roles in the induction of hair growth, cell proliferation and cell-cell interaction, in maintaining tissue integrity, in wound healing and in modulating immune responses. The present sequence is a polypeptide of the invention.
Human novel secreted protein,
                         07-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                New polynucleotides and polypeptides encoded by the polynucleotides isolated from skin cells, useful for treating skin wounds, cancers, growth and developmental defects, inflammatory diseases, or for
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N-PSDB; ABL35081.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; rat; mouse; skin cell; skin wound; cancer; growth defect; developmental defect; inflammatory disease; dermatological; vulrimmunomodulator; anti-inflammatory; cytostatic; neuroprotective.
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                                               AAU15883;
                                                                       AAU15883 standard;
                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                             Claim 4; Page 456-457; 466pp; English
                                                                                                                                                                                                                                                                                                                                                                                                     modulating immune responses
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25-JUL-2000;
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                       (first entry)
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2000US-221232P
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                                                                       Protein;
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kumble
                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      χĎ;
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XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Human; immunosuppressive; antiarthritic; antirheumatic; cytostacic; cardiant; vasctropic; carebroprotective; mortropic; cytostacic; cardiant; vasctropic; carebroprotective; mortropic; cytostores exvected protective; ministing; fundiche; optialmalogical; which provides the discontant; cardiavascular discorder; cardiavascular disc
ט ש ש ש ש ש ש ש ש ש ש ש ש ש ש ש ש ש ש ש
ឆ់ត់ ឆ់ត់ ឆ់ត់ ឆ់ត់ ឆ់ត់ ឆ់ត់ ឆ់ត់ ឆ ឆ ឆ ឆ
14 - SEP - 2000 21 - SEP - 2000 21 - SEP - 2000 25 - SEP - 2000 26 - SEP - 2000 27 - SEP - 2000 29 - SEP - 2000 29 - SEP - 2000 20 - OCT - 2000 21 - NOV - 2000 20 - OCT - 2000 21 - NOV - 200
2000US-0232399 2000US-0232401 2000US-0232401 2000US-0233063 2000US-0233063 2000US-0233063 2000US-0233063 2000US-0234297 2000US-0235494 2000US-02354844 2000US-02353836 2000US-02353836 2000US-0236367 2000US-0236367 2000US-0236367 2000US-0236367 2000US-0236368 2000US-0237039 2000US-0237039 2000US-0241861 2000US-0241861 2000US-0246474 2000US-0246474 2000US-0246611 2000US-0246611 2000US-0246528 2000US-0246611 2000US-0246528 2000US-024628 2000US-024928

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06-DEC-2000;
08-DEC-2000;
08-DEC-2000;
08-DEC-2000;
08-DEC-2000;
08-DEC-2000;
11-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 include autoimmune diseases e.g. rheumatoid arthritis, hyperproliferative disorders e.g. neoplasms of the breast or liver, cardiovascular disorders e.g. cardiac arrest, cerebrovascular disorders e.g. cardiac arrest, cerebrovascular disorders e.g. carebral ischaemia, angiogenesis, nervous system disorders e.g. alzhelmer's disorders e.g. cornel infection, and many other disorders isted in the specification. The polypeptides can also be used to aid wound healing and epithelial cell proliferation, to prevent skin aging due to sunburn, to maintain organs before transplantation, for supporting cell culture of primary tissues, to regenerate tissues and in chemotaxis. The polypeptides can also be used as a food additive or preservative to increase or decrease storage
                               antibacterial; endocrine; cardiant; central nervo
anti-HIV; fungicide; antimutagen; cardiovascular;
                                                antiinflammatory;
antibacterial; en
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   are also used in diagnosing a pathological condition or susceptibility to a pathological condition. Antibodies to the proteins can also be used in alleviating symptoms associated with the disorders and in diagnostic immunoassays e.g. radioimmunoassays or enzyme linked immunosorbant assays (ELISA). Disorders which are diagnosed or treated immunosorbant assays (ELISA).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The
 dermatological;
               antiaggregant;
                                                                                   Human;
                                                                                                                                                                                                                     AAM25880 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                    capabilities, fat content, lipid, protein, carbohydrate, vitamins, minerals, cofactors and other nutritional components. The present sequence represents a novel secreted protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         rabbits, goats,
are also used i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             encoded
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 11;
                                                                                                                                                                                      AAM25880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           prevent,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New nucleic acid molecules encoding 461 human secreted proteins for diagnosing, preventing, treating or ameliorating medical conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rosen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (HUMA-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-JAN-2001;
                                                                                                                                                                                                                                                                                                       181 NSTCPIC
                                                                                                                                                                                                                                                                                                                                                                                        Local
                                                                                                                                                                                                                                                                                                                                        4 NXXCPXC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            invention
                                                                                 cancer; ulcer; HIV infection; human immunodeficiency virus;
                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       secreted proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            food
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ition relates to isolarow with a proteins are used to secreted proteins. The nucleic acids and proteins are used to treat or ameliorate a medical condition in e.g. humans, mice, treat or ameliorate a medical condition in e.g. humans, mice, treat or sheep. They
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID No 836;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Barash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000US-0256719.
2000US-0251479.
2000US-0251856.
2000US-0251868.
2000US-0251869.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            preventing,
dadditives
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2000US-0251990.
2000US-0254097.
                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                      10
                                                                                                                                                   (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          relates to isolated nucleic
                                                                                                                  sequence
               haemostatic;
                                                                antirheumatic;
                                                                                                                                                                                                                                                                                                                                                                                      76.9%;
57.1%;
                                                                                                                  SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         or preservatives
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          980pp; English.
                                                                                                                    IJ
                 vulnerary;
                                                                                                                                                                                                                       231 AA
                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                     Score 30; DB 22
Pred. No. 6e+02;
                                                                                                                  NO:1395
                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                              antiarthritic; immunosuppressive;
nt; central nervous system; viruci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          acid molecules and
                                                                                                                                                                                                                                                                                                                                                                       ω
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                                                                                                                                                                                                                                                                                                                                                                                                    Length 201;
                 osteopathic; eczema;
                               antianaemic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         and their
are used
cytostatic;
                                                virucide;
                                                                                                                                                                                                                                                                                                                                                                     0;
                                anaemia;
                                                                                                                                                                                                                                                                                                                                                                       Gaps
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AAY02654
                                                                     RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cc cells they are expressed in such as: antiinflammatory; antinheumatic; cc antiarthritic; immunosuppressive; antibacterial; endocrine; cardiant; cc central nervous system; virucide; anti-HIV; fungicide; antimutagen; cc cardiovascular; antianaemic; antiaggregant; haemostatic; vulnerary; cc antiulcer; osteopathic; dermatological; antialergic; antiasthmatic; cntostatic; neuroprotective; antidepressant; nootropic; cc antiparkinsonian; and immunostimulant. The proteins and polynucleotides cc encoding them can be used in gene therapy, antisense therapy and vaccine production. The proteins and polynucleotides are useful for screening for cc agonists or antagonists of a protein and for the treatment and diagnosis cof disorders associated with the activity of a protein e.g. inflammation, neuropathology, cardiac anaphylaxis, viral, bacterial, HIV and fungal confections, autoimmunity, genetic diseases, haematopoletic disorders, canaemia, platelet disorders, thrombocytopaenia, wounds, burns, ulcers, osteoporosis, severe combined immunodeficiency, eczema, allergic crialisans, diabetes, cancer, multiple sclerosis, depression, analysis and parkiner, adiabetes, cancer, multiple sclerosis, depression, and allergic contributions, actima, diabetes, cancer, multiple sclerosis, depression, and contributes and
                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-DEC-1999;
21-JAN-2000;
25-APR-2000;
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AAY02654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           neurological disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rhinitis, as
Alzheimer's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAH99166 to AAH99904 encode the human proteins given in AAM25225 AAM25963. The proteins can have activities based on the tissues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ААН99166 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 20; Page 286; 1217pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alzheimer's disease; Parkinson's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         treatment
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Isolated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-DEC-2000;
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                                                                                                                                                                                      116 NAECPAC
                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                            4 NXXCPXC 10
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                                                                                                                                                                                                                                                                                                                                      Similarity 4; Conserv
standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             human polynucleotides encoding polypeptides, t and diagnosis of e.g. cancer, ulcers and HI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Liu
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; 2000US-0488725.
; 2000US-0552317.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      disease,
                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                      122
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Protein;
                                                                                                                                                                                                                                                                                                                                                                                76.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Parkinson's
                                                                                                                                                                                                                                                                                                                                                                             18;
                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                     Score 30;
Pred. No.
                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      disease,
                                                                                                                                                                                                                                                                                                                                                                                6
                                                                                                                                                                                                                                                                                                                                                                                                                DВ
                                                                                                                                                                                                                                                                                                                                                                                .6e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                   22;
                                                                                                                                                                                                                                                                                                                                                                                                            Length 231;
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vaccine; inflammation;
                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     es, useful for HIV infection
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11-JUN-1999

(first entry)

secreted

protein

encoded by

gene 5 clone

HCNSP40

tissue;

secreted protein; fusion protein; gene therapy; protein therapy;

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12-SEP-1997
08-JUL-1997
                                                                                                                                                                                                                                                                                                          18-AUG-1997;
18-AUG-1997;
18-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                  18-AUG-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              diagnosis; tissue; cancer; tumour; neurodegenerative disorder; leukaemia; developmental abnormality; foetal deficiency; blood; allergy; renal; immune system; asthma; lymphocytlo disease; brain; hepatic; lymphoma; inflammation; ischaemic shock; Alzheimer's disease; restenosis; AIDS; cognitive disorder; schizophrenia; prostate; obesity; osteoclast; thymus; osteoporosis; arthritis; testis; lung; thyroiditis; thyroid; digestion; endocrine; metabolism; regulation; malabsorption; gastritis; neoplasm.
                                                                                     New isolated human genes and the secreted polypeptides they encode useful for diagnosis and treatment of e.g. cancers, neurological disorders, immune diseases, inflammation or blood disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      W09902546-A1
         This sequence represents a secreted human protein encoded by the clone detailed in the descriptor line. The gene can be used to g fusion proteins by linking to the gene to a human immunoglobulin portion (e.g. AAX27302) for increasing the stability of the fused
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-JAN-1999
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                                                                   Claim 11;
                                                                                                                                                                      Olsen
                                                                                                                                                                                                                                                             18-AUG-1997;
18-AUG-1997;
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18-AUG-1997;
                                                                                                                                                                                                                                                                                                                                             18-AUG-1997
                                                                                                                                                                                                                                                                                                                                                       18-AUG
                                                                                                                                                                                                      (HUMA-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sapiens
                                                                                                                                     1999-120770/10.
DB; AAX27315.
                                                                                                                                                                     r LA,
HS,
                                                                                                                                                                                                                                                                                                                                                                    -1997
                                                                                                                                                                                                      HUMAN GENOME
                                                                  Page 322;
                                                                                                                                                                   Ebner R,
Rosen CA,
                                                                                                                                                                                                                          97US-0052803.
97US-0055722.
97US-0055723.
97US-0055947.
97US-0055949.
97US-0055949.
97US-0055953.
97US-0055964.
97US-0055964.
97US-0056366.
97US-0058661.
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97US-0051928.
97US-0051929.
97US-0051930.
97US-0051931.
97US-0051932.
97US-0052732.
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97US-0052793.
97US-0052795.
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97US-0051925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98WO-US13684
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 ç
                                                               464pp;
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                                                                                                                                                                                                      SCI INC
                                                                                                                                                                    Fischer CL,
Ruben SM,
the human protein only
                                                                  English.
                                                                                                                                                                    Shi
                                                                                                                                                                    Kyaw
hi Y,
                                                                                                                                                                   H, Lafleur DW, Li Y, Soppet DR, Zeng Z;
                                 to generate
                                            the gene
                                                                                                                                                                                Moore
                                                                                                                                                                                PA;
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AAZ98109 to AAZ98242 encode AAY87224 to AAY87357 which represent the human signal peptide-containing proteins HSpP-1 to HSpP-134. HSPPs have anticancer, anti-inflammatory, antimicrobial, nootropic, heparotropic, neuroprotective, cardiovascular and antiasthmatic activities, and can

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AAY87321
IID AAY
XX
AC AAY
XXX
DT 11-
XXX Hum
XXX Hum
XXX Hum
XXX Ant
XXW ANT

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-JUN-1998;
31-JUL-1998;
01-OCT-1998;
11-DEC-1998;
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                                                                                                                                                                                                                                                                                                                                                                                    Lal P, T
Akerblom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; signal peptide-containing protein; HSPP; diagnosis; cancer; inflammation; cardiovascular disease; anticancer; anti-inflammatory; antimicrobial; nootropic; neuroprotective; cardiovascular; hepatotropic; antiasthmatic; gene therapy; cell proliferation; neurological disorder; reproductive disorder; developmental disorder; arteriosclerosis; cirrbosis; psoriasis; acquired immune deficiency syndrome; anaemia; asthma; Crohn's disease; infection; Alzheimer's disease; schizophrenia;
                                                                                                                                                                           New human signal peptide-containing proteins useful in treatment, prevention and diagnosis of e.g. cancer, inflammation and cardiovascular disease \,
                                                                                                                                                                                                                                                                                  WPI; 2000-160673/14.
N-PSDB; AAZ98206.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   muscular dystrophy.
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98US-0102686.
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Young J, Yue
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57.1%;
                                                                                                                              English
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                  Corley NC, Guegler KJ,
H, Patterson C, Reddy
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6.7e+02;
ches 3;
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for each of the 123
highly expressed in
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                                                                                                                                                                                                                                                                                                                                                                                    Baughn MR;
R, Hillman
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pharmaceutical;
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receptor immunoadhesin; gene mapping.
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Pred. No. 6.7e+02;
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11-AUG-1998;
11-AUG-1998;
                                            The invention provides membrane-bound PRO polypeptides and polynucleotides encoding them. The PRO sequences of the invention were identified based on extracellular domain homology screening. The PRO sequences have homology with proteins including LDI receptors, TIE ligands and various enzymes. The membrane-bound proteins and receptor molecules are useful as pharmaceutical and diagnostic agents. Receptor immunoadhesins, for instance, can be used as therapeutic agents to block receptor-ligand interactions. The membrane-bound proteins can also be employed for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interaction. The PRO encoding sequences are useful as hybridization probes, in chromosome and gene mapping and in the generation of antisense RNA and DNA. PRO nucleic acid sequences
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                                    are useful as hybridization probes, in chromosome and gene me the generation of antisense RNA and DNA. PRO nucleic acid sewill also be useful for the preparation of PRO polypeptides,
                                                                                                                                                                                                                                                                              WPI; 2000-072883/06
N-PSDB; AAZ65061.
                                                                                                                                                                                                                           claim 12; Fig 212; 822pp; English.
                                                                                                                                                                                                                                                                                                                     Wood WI,
                          by recombinant techniques
                                                                                                                                                                                                                                                    Membrane-bound proteins and related nucleotide sequences
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Yuan J;
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                                                                                                                                                                                                                                                                                                                                 Smith V,
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                                     especially
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Sequence

237

(GETH) GENENTECH INC

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RESULT 15

AAU29134

ID AAU293

XX AAU29134

AC AAU29

XX PARO
DE Human

XX PRO
DE Homo

XX DAO09;

KW dog;

KW dog;

KW dog;

KW dog:

COS Homo

XX 20-SE

XX 20-SE

XX 20-SE

XX 21-MA

PR 02-MA

PR 11-MA

PR 21-MA

PR 11-APP

PR 25-APP

PR 26-APP

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Best Local Similarity
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                                          11-APR-2000;
18-APR-2000;
18-APR-2000;
25-APR-2000;
25-APR-2000;
25-APR-2000;
30-MAY-2000;
30-MAY-2000;
30-MAY-2000;
30-MAY-2000;
22-MIN-2000;
02-JUN-2000;
02-JUN-2000;
03-MAY-2000;
04-AUG-2000;
04-AUG-2000;
01-DEC-2000;
01-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-APR-2000;
11-APR-2000;
11-APR-2000;
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04-APR-2000;
04-APR-2000;
11-APR-2000;
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21-MAR-2000;
28-MAR-2000;
29-MAR-2000;
29-MAR-2000;
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14-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRO polypeptide; mammal; tumour; cancer; human; cattle; horse; sheep; dog; cat; pig; goat; rabbit; tumour necrosis factor alpha; TNF-alpha; blood; chondrocyte cell; cell proliferation; cell differentiation; colon; adrenal; lung; breast; prostate; rectum; cervix; liver; genetic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28-FEB-2001; 2001WO-US06520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200168848-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
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                                          2000US-187202P
2000US-18936P
2000US-189328P
2000US-199828P
2000US-191007P
2000US-191007P
2000US-193032P
2000US-193053P
2000US-193655P
2000US-194449P
2000US-194647P
2000US-195975P
2000US-196690P
2000US-196690P
2000US-196690P
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2000WO-US05841
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57.18;
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Pred. No. 6.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
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Search completed: December 13, 2002, 08:38:13 Job time: 5.63804 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequences AAU29024-AAU29328 represent PRO polypeptides of the invention. CC The PRO polypeptides and their associated nucleic acids can be used to CC detect the presence of a tumour in a mammal by comparing the level of CC expression of a PRO polypeptide in a test sample of cells from the animal CC expression in the test sample indicates the presence of a tumour in the CC expression in the test sample indicates the presence of a tumour in the CC mammal. Mammals include dogs, cats, cattle, horses, sheep, pigs, goats CC and rabbits but are preferably human. The polypeptides can be used to Stimulate tumour necrosis factor (TNF) alpha release from human blood, when contacted with it. A specific polypeptide can be used to stimulate the proliferation or differentiation of chondrocyte cells. The PRO CC proteins can be used to determine the presence of tumours and also CC susceptibility to tumour development, particularly adrenal, lung, colon, CC breast, prostate, rectal, cervical, or liver tumours, in mammalian CC subjects. The oligonucleotide probes specific for the PRO nucleic acids can be used for genetic analysis of individuals with genetic disorders.
                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel nucleic acids encoding PRO polypeptides, used to diagnose the presence of tumours, such as prostate and breast tumours, in mammals to screen for modulators of the compounds -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-602746/68.
N-PSDB; AAS46035.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Baker KP, Chen J, Desnoyers L, Goddard A, Godowski PJ, Gurney AL; Pan J, Smith V, Watanabe CK, Wood WI, Zhang Z;
                                                                                                                                                122 NAECPAC 128
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                                                                                                                                                                                                                                                                                                 Similarity 57.1
4; Conservative
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                                                                                                                                                                                                                                                                                                                                    76.9%;
57.1%;
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Minimum DB seq
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469.5
469.5
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78.5
77.5
77.5
77.5
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                                                                                                                                                                                                                                                                                                                                                                                                                      Published_Applications_AA:*

1: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep:*

2: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*

3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*

4: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*

4: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*

5: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*

6: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*

7: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*

9: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*

10: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep:*

11: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep:*

12: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep:*

13: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep:*

14: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep:*
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length: 2000000000
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851
1 MFQDPQERPRKLPQL
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          Listing first 45 summaries
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Copyright (c) 1993 - 2002 Compugen Ltd
          Length
         390
278
383
256
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553
4636
471
471
285
162
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468
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US-10-000-903-10

US-10-000-903-6

US-10-000-903-21

US-10-000-903-23

US-10-000-903-23
                US-09-756-186-2

US-09-764-898-183

US-09-764-898-163

US-09-835-996A-33

US-09-835-996A-33

US-09-970-532-2

US-09-756-1866

US-09-788-789-18

US-09-764-864-925

US-09-864-761-37-91

US-09-884-987-4
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Sequence 4, Appli
Sequence 10, Appl
Sequence 14, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 23, Appl
Sequence 183, App
Sequence 183, App
Sequence 33, Appl
Sequence 3, Appli
Sequence 6, Appli
Sequence 6, Appli
Sequence 6, Appli
Sequence 925, App
Sequence 3, Appli
                                                                                                                                                                                                                                                                                              Description
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ALIGNMENTS

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PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION UNMBER: GB 9717953.5
PRIOR FILING DATE: 1997-08-22
NUMBER OF SEO ID NOS: 23
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 4
LENGTH: 273
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APPLICANT: Cabezon Silva, Teresa
APPLICANT: Delisse, Anne-Marie Eva Fernande
APPLICANT: Gerard, Catherine Marie Ghislain
APPLICANT: Lombardo-Bencheikh, Angela
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45107
CURRENT APPLICATION NUMBER: US/10/000,903
CURRENT FILING DATE: 2001-10-01
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US-10-000-903-4
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Publication No. US20020182221A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 150; Conserva
                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM: Homo sapien
  234
                                        121
                                                                                  174
                                                                                                                                                              114
                                                                                                                      61
                                                                                                                                                                                     1 MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
                  KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
                                                                                                   AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
                                                                                                                                                              MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL
                                                                                AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
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Delisse, Anne-Marie Eva Fernande
Gerard, Catherine Marie Ghislaine
                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                             99.1%; Score 843; DB 9; Length 273; 99.3%; Pred. No. 4.3e-79;
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76 76 74.5 74.5 74.5

US-10-000-903-10

Sequence 10, Application US/10000903 Publication No. US20020182221A1

US20020182221A1

GENERAL INFORMATION

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US-10-000-903-6
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; ORGANISM: Homo sapien
US-10-000-903-10
                                                                                                   us-10-,000-903-6
                                                                                                                                                                                                                                                                                                                                                                                                 ; GENERAL INFORMATION:
; APPLICANT: Bruck, Claudine
; APPLICANT: Cabezon Silva, T
; APPLICANT: Delisse, Anne-Ma
; APPLICANT: Gerard, Catherin
; APPLICANT: Lombardo-Benchei
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Matches
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Best Local Similarity
Matches 150; Conserva
                                   Query Match
Best Local S
                                                                                                                                                        SEQ ID NO 6
LENGTH: 371
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                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/10/000,903
CURRENT FILING DATE: 2001-10-01
PRIOR APPLICATION NUMBER: CCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR FILING DATE: 1997-08-22
                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Cabezon Silva, Teresa
APPLICANT: Delisse, Anne-Marie Eva Fernande
APPLICANT: Gerard, Catherine Marie Ghislaine
APPLICANT: Lombardo-Bencheikh, Angela
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Bruck, Claudine
APPLICANT: Cabezon Silva,
APPLICANT: Delisse, Anne-h
APPLICANT: Gerard, Catheri
APPLICANT: Lombardo-Benche
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR FILING DATE: 1997-08-22
                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 23
SOFTWARE: FastSEQ for Windows Version
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FILE REFERENCE: B45107
CURRENT APPLICATION NUMBER: US/10/000,903
CURRENT FILING DATE: 2001-10-01
                                                                                                                 TYPE: PRT
ORGANISM: Homo sapien
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
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Gerard, Catherine Marie Ghislaine
Lombardo-Bencheikh, Angela
                  Conservative
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99.3%;
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99.3%;
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              Score 843; DB 9 Pred. No. 6e-79; 0; Mismatches
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                                                       DB 9;
                                                     Length 371;
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CURRENT APPLICATION NUMBER: US/10/000,903
CURRENT FILING DATE: 2001-10-01
PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR FILING DATE: 1997-08-22
NUMBER OF SEQ ID NOS: 23
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 14
LENGTH: 390
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                                                                                                                                                                                                           GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 150;
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Best Local Similarity 99.3%;
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                                                                      APPLICANT: Bruck, Claudine
APPLICANT: Cabezon Silva, Teresa
APPLICANT: Cabezon Silva, Teresa
APPLICANT: Delisse, Anne-Marie Eva Fernande
APPLICANT: Gerard, Catherine Marie Ghislaine
APPLICANT: Lombardo-Bencheikh, Angela
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45107
CURRENT APPLICATION NUMBER: US/10/000,903
CURRENT FILING DATE: 2001-10-01
PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Bruck, Claudine
APPLICANT: Cabezon Silva,
APPLICANT: Delisse, Anne-b
APPLICANT: Gerard, Catheri
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Delisse, Anne-Marie Eva Fernande
Gerard, Catherine Marie Ghislaine
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No. US20020182221A1
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Pred. No. 6.4e-79;
0; Mismatches 1
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* PRIOR EILING DATE: 1997-08-22

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SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 21:
SEQ ID NO 21:
SECURIOR 278
TYPE: PRT
ORGANISM: Homo sapien
US-10-000-903-21
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             RESULT 7
US-09-756-186-2
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LENGTH: 383
TYPE: PRT
Sequence 2, Application US/09756186
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Publication No.
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CURRENT FILING DATE: 2001-10-01
PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
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TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45107
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SOFTWARE: FastSEQ for Windows Version 3.0
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APPLICANT: Gerard, Catherine Marie Ghislaine
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APPLICANT: Cabezo
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                                                                                                   122 KQRFHNIRGRWTGRCMSCCRSSR----TRRETQL 151
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nes 87; Conserv
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                                                                                                                                                                                                            FEDPTRRPYKLPDLCTELNTSLQDIEITCVYCKTVLELTEVFEFAFKDLFVVYRDSIPHA 174
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                                                                              KRRFHNIAGHYRGQCHSCCNRARQERLQRRRETQV 269
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87; Conserv
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No. US20020182221A1
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56.1%;
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Pred. No. 6.8e-41;
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GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins, an
FILE REFERENCE: PJ501
CURRENT APPLICATION NUMBER: US/09/764,898
CURRENT FILING DATE: 2001-01-17
Prior application data removed - consult PALM o
NUMBER OF SEQ ID NOS: 311
SOFTWARE: Patentin Ver. 2.0
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US-09-764-898-183
SOFTWARE: Pa
SEQ ID NO 183
                                                                                                                                                                                Sequence 183, Application US/09764898 Patent No. US20020090673A1
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 256 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION: TELEPHONE: (202) 628-5197
TELEFAX: (202) 737-3528
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APPLICATION NUMBER:
FILING DATE:
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MEDIUM TYPE: Floppy disk
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APPLICANT: Chappel, Scott C.
APPLICANT: HYBRID PROTEINS
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                                                                                                                                                                                                                                                                                            178 ENPFFSQPGAPILQCMGCCFSRAYPTPLRSKKT 210
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Browdy, Roger L.
REGISTRATION NUMBER: 25,618
REFERENCE/DOCKET NUMBER: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC OPERATING SYSTEM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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SYSTEM: PC-DOS/MS-DOS
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Pred. No. 0.37
18; Mismatches
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                                                   consult PALM or file wrapper
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).37;
                                                                                                                            and Antibodies
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LENGTH: 553
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (393)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-764-898-163
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US-09-764-898-163
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-764-898-183
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US-09-835-996A-33
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APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
FILE REFERENCE: PJZ01
                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                Sequence 33, Application US/09835996A Patent No. US20020142953A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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Best Local
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APPLICANT:
APPLICANT:
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                             APPLICANT:
                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Prior application data removed - consult PALM or file wrapper NUMBER OF SEQ ID NOS: 311
APPLICANT:
                                                           APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                    51 CIVYRDGNPYAVC-----DKCLKFYSKYSEYRHYCYSLYGTTL------EQQYNK 94
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26; Conserv
                                                                                                                  Montgomery, Julie
Tang, Y. Tom
Zhou, Ping
Goodrich, Ryle
Liu, Chenghua
                         Wehrman, Tom
Drmanac, Radoje
Ren, Feiyan
Qian, Xiahong
                                                                             Asundi, v. Asundi, v. Qing
                                                                                                                                                                                                                   Ballinger, Dennis
            Wang,
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24.5%;
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APPLICANT: Kehril, Jr., Marcus
APPLICANT: Lee, Eun-Kyung
APPLICANT: Lee, Eun-Kyung
APPLICANT: Mwangi, Simon
TITLE OF INVENTION: BOVINE TUMOR NECROSIS FACTOR RECTITLE OF INVENTION: BOVINE TUMOR NECROSIS FACTOR RECTITLE REFERENCE: 08411-018001
CURRENT APPLICATION NUMBER: US/09/970,532
CURRENT FILING DATE: 2001-10-03
PRIOR APPLICATION NUMBER: 09/513,007
PRIOR PILING DATE: 2001-02-25
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                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 31; Conserv
                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 4, Application US/09970532 Patent No. US20020076765Al
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                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS:
SOFTWARE: FastSEQ for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: US 09/598,042 PRIOR FILING DATE: 2000-06-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: US 09/631,451
PRIOR FILING DATE: 2000-08-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: MATERIALS AND METHODS RELATING FILE REFERENCE: 28110/35915A
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                                                                                                                                                                                                                                                                                                                                           LENGTH:
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140 -- CRSSRTRR 147
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                                                                                                                       LSCSRCRDEMFQVEI-----SPCVVDRD----TVCG-CRK----
                                                                              LEQQYNKPLCDLLIRCINCQKPLCP-----EEKQRHLDKKQRFHNIRGRWTGRCMSC 139
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ilarity 24.5%;
Conservative 1:
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                                       ---GFRCLNCS--LCPNGTVNIPCQERQDTICHCHMGFFLKG---AKCISC
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                                                                                                                                                                                                                    9.1%;
23.8%;
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Pred. No. 15;
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Db 154 HDCKNKECEK 163

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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/09/970,532
CURRENT FILING DATE: 2001-10-03
PRIOR APPLICATION NUMBER: 09/513,007
PRIOR FILING DATE: 2000-02-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Taylor, J. Michael
APPLICANT: Kehril, Jr., Marcus
APPLICANT: Lee, Eur-Kyung
APPLICANT: Lee, Eur-Kyung
TITLE OF INVENTION: BOVING TUMOR NECROSIS FACTOR RECEPTOR-1
TITLE OF INVENTION: AND METHODS OF USE
FILE REFERENCE: 08411-018001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 471
                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIA Release #1.0, Version
CURRENT APPLICATION DATA:
           CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                               APPLICANT: Chappel, Scott C.
TITLE OF INVENTION: HYBRID PROTEINS
NUMBER OF SEQUENCES: 22
                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      183 HDCKNKECEK 192
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                                                                                                                                                                                                                                                       STREET: 419 Seven CITY: Washington STATE: D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                88 LEQQYNKPLCDLLIRCINCQKPLCP-----EEKQRHLDKKQRFHNIRGRWTGRCMSC 139
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                                                                        FILING DATE:
                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                         COUNTRY: UZIP: 22207
                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
FILING DATE:
                                                                                                                                                                                                                                                                                            E: BROWDY AND NEIMARK
419 Seventh Street N.W., Ste. 300
                                                                                                                                                                                                                                             USA
                                                                                                                                                                                                                                                                                                                                                                                                            Jameson, Bradford A.
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23.8%;
               08/804,166
                                                                                          US/09/756,186
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Pred. No. 1.5;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: Dahiyat, Bassil
APPLICANT: Filikov, Anton
TITLE OF INVENTION: DESIGN AND DISCOVERY OF PROTEIN BASED TNF-ALPHA
TITLE OF INVENTION: VARIANTS FOR THE TREATMENT OF TNF-ALPHA RELATED
TITLE OF INVENTION: DISORDERS
FILE REFERENCE: A-68990-1/RFT/RMS/RMK
                                                                                                                                                                                                                                                                                                                                               SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 18
                                                                                                                                                                           Query Match
Best Local :
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CURRENT FILING DATE: 2001-03-02
PRIOR APPLICATION NUMBER: US 60/186,427
PRIOR FILING DATE: 2000-03-02
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                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 22
                                                                                                                                                                                                                                                                      TYPE: PRT ORGANISM: Artificial Sequence FEATURE:
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ATTORNEY/AGENT INFORMATION:
NAME: Browdy, Roger L.
REGISTRATION NUMBER: 25,618
REFERENCE/DOCKET NUMBER: CAN
                                                                                                                                                                                                                                                                                                                                 LENGTH: 162
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                                                                                                                                                   / Match 9.0%; Score 76.5; DE Local Similarity 27.4%; Pred. No. 0.57; DE 34; Conservative 15; Mismatches
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98 SENQFQCFNCSL---CLNGTVHLSCQEKQNTVCTCHAGFFLR---ENECVSCSNCKKSLE 151
                                  88 LEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRR 147
                                                                                                                 28 LECVYCKQQLLRREVYDFAFRDLCIVYRDGNPYAVCDKCLKFYSKYSEYRHYCYSLYGTT 87
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20.9%; Pred. No.
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GENERAL INFORMATION:

APPLICANT: Rosen et al.

TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies

FILE REFERENCE: PT223

CURRENT APPLICATION NUMBER: US/09/764,864

CURRENT FILING DATE: 2001-01-17

Prior application data removed - consult PALM or file wrapper

NUMBER OF SEQ ID NOS: 1792

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 925

LENGTH: 276

TYPE: PRT
Search completed: December 13, 2002, 08:46:16 Job time : 16.8221 secs
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US-09-764-864-925
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NAME/KEY: SITE
NAME/KEY: SITE
LOCATION: (198)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (203)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (229)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (229)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
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152 CTKL 155
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ALIGNMENTS

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RESULT 1
208975
ID 0897
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Q89755;
Q1-NOV-1996
Q1-NOV-1996
Q1-JUN-2001
SPECIES-Human papillomavirus type 16; STRAIN-AS, EA7768T, AND EA7496T; van Duin M., Snijders P.J., Vossen M.T., Klaassen E., Voorhorst F., Verheijen R.H., Helmerhorst T.J., Meijer C.J., Walboomers J.M.; "Analysis of Human papillomavirus type 16 E6 variants in relation to p53 codon 72 polymorphism genotype in cervical carcinogenesis."; Submitted (JUN-1999) to the EMBL/GenBank/DDBJ databases. EMBL; U34126; AAA91673.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                   SPECIES=Human papillomavirus;
Farmer A.D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Human papillomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of the L2, and L1 coding segments "; J. Virol. 69:7743-7753(1995).
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MEDLINE=96079021; PubMed=7494284;
Yamada T., Wheeler C.M., Halpern A.L., Stewart A.C., Hildesheim
                                                                                                                                                                                                                                                                                                                                                                                    Submitted (AUG-1995) to the
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                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
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(TIEMBLrel. 17, Last annotation update)
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EMBL; U34123; AAA91670.1; -.
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EMBL; AJ388056; CAB45104.1; -.
EMBL; AJ388061; CAB45114.1; -.
Interpro; IPR001334; E6.
Pfam; PF00518; E6; 1.
SEQUENCE 151 AA; 18334 MW; F
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Q919C6;
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E6 protein (E6.
Q89852;
Q89852;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Watts K.J., Thompson C.H., Cossart Y.E., Rose B.R.;
"Sequence variation and physical state of human papillomavirus type cervical cancer isolates from Australia and New Caledonia.";
Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.

EMBL; AF404697; AAL01351.1; -.

InterPro; IPR001334; E6.
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STRAIN-HPV16E6CC6;
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Pred. No. 1e-84;
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01-NOV-1996 (TremBLz
01-JUN-2001 (TremBLz
Early transforming p
                                                                                                                                                                                                                                                                                                                   EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                             SPECIES=Human papillomavirus type 16; STRAIN-XINJIANG; Ma Z., Qian D., Ma J., Lin R., Ming W., Zhong Z., Zhang "Cloning and Sequencing of HPV16 E6 gene from Cervical C Biopsies in Xinjiang.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SPECIES-Human papillomavirus type 16; STRAIN-VARIOUS STRAINS; van Duin M., Snijders P.J., Vossen M.T., Klaassen E., Voorhorst F., Verheijen R.H., Helmerhorst T.J., Meijer C.J., Walboomers J.M.; "Analysis of Human papillomavirus type 16 E6 variants in relation to p53 codon 72 polymorphism genotype in cervical carcinogenesis."; Submitted (JUN-1999) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                       Shengwu Huaxue Yu Shengwu EMBL; U34134; AAA91681.1; EMBL; U34127; AAA91674.1; EMBL; U34133; AAA91680.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SPECIES=Human papillomavirus type 16; STRAIN=EC169GDEL; van Duin M., Snijders P.J., Vossen M.T., Klaassen E., Voorhorst F., Verheijen R.H., Helmerhorst T.J., Meijer C.J., Walboomers J.M.; "Analysis of Human papillomavirus type 16 E6 variants in relation to p53 codon 72 polymorphism genotype in cervical carcinogenesis."; submitted (JUL-1999) to the EMBL/GenBank/DDBJ databases.
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Farmer A.D.;
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NCBI_TaxID=10566, 10581;
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EMBL; AJ388057; CAB45106.1; -.
EMBL; AF337851; AAG45940.1; -.
InterPro; IPR001334; E6.
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Q1-JUN-2002
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E6 protein.
E6.
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Chan P.K.S., Lam C.W., Cheung T.H., Li W.W.H., Lo K.W.K., Cheung J.L.K., Xu L.Y., Cheng A.F.;
Cheung J.L.K., Xu L.Y., Cheng A.F.;
"Human papillomavirus type 16 intratypic variant infection for cervical neoplasia in Southern China.";
Submitted (FEB-2012) to the EMBL/GenBank/DDBJ databases.
EMBL; AF125673; AAD33352.1; -.
EMBL; AF486322; AAL96627.1; -.
InterPro; IPR001334; E6.
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01-NOV-1999 (TrEMBLrel. 12, Created)
01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation updat
Isolate 16W12E, complete genome (E6 protein).
 Human papillomavirus type Viruses; dsDNA viruses, nc Papillomavirus. NCBI_TaxID=10581;
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Submitted (FEB-1999)
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SEQUENCE FROM N.A.
STRAIN-E-G449T;
Chan P.K.S., Lam C.W., Cheung T.H., Li W.W.H., Lo
Cheung J.L.K., Xu L.Y., Cheng A.F.;
"Human papillomavirus type 16 intratypic variant
for cervical neoplasia in Southern China.";
Submitted (FEB-2002) to the EMBL/GenBank/DDBJ dat
EMBL; AF486316; AAL96621.1;
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Q1-JUN-2002
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Q1-JUN-2002
 Q89640;
Q89640;
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"Human papillomavirus type 16 intratypic variant infection for cervical neoplasia in Southern China.";

Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databases.

EMBL; AF486318; AAL96633.1;

SEQUENCE 158 AA; 19173 MW; 14EBF5ADCFDB3640 CRC64;
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 van Duin M., Snijders P.J., Vossen M.T., Klaassen E., Voorhorst F. Verheljen R.H., Helmerhorst T.J., Meijer C.J., Walboomers J.M.; "Analysis of Human papillomavirus type 16 E6 variants in relation p53 codon 72 polymorphism genotype in cervical carcinogenesis."; Submitted (JUN-1999) to the EMBL/GenBank/DDBJ databases. EMBL; AJ388059; CAB45101.1; -. EMBL; AJ388058; CAB45101.1; -. EMBL; AJ388058; CAB4510.1; -. InterPro; IPR001334; E6.
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Pred. No. 2.6e-84;
L; Mismatches 1
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Chan P.K.S., Lam C.W., Cheung T.H., Li W.W.H., Li Cheung J.L.K., Xu L.Y., Cheung A.F.;
Cheung J.L.K., Xu L.Y., Cheung A.F.,
Human papillomavirus type 16 intratypic variant for cervical neoplasia in Southern China.";
Submitted (FEB-2002) to the EMBL/GenBank/DDBJ da EMBL; AF486309; AAL96604.1;
EMBL; AF486300; AAL96605.1;
EMBL; AF486300; AAL96607.1;
EMBL; AF486308; AAL96601.1;
EMBL; AF486308; AAL96611.1;
EMBL; AF486308; AAL96611.1;
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Q9WMP5;
01-NOV-1999
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01-DEC-2001
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01-JUN-2002
01-JUN-2002
01-JUN-2002
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EMBL; AF4
SEQUENCE
                                            Q9WMP5
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Best Local
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STRAIN-E-G276T, AND E-G276G442T;

STRAIN-E-G276T, AND E-G276G442T;

Chan P.K.S., Lam C.W., Cheung T.H., Li W.W.H., Lo K.
Cheung J.L.K., Xu L.Y., Cheng A.F.;

"Human papillomavirus type 16 intratypic variant inf
for cervical neoplasia in Southern China.";

Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databe
EMBL; AF486315; AAL96620.1;

EMBL; AF4863215; AAL96628.1;

EMBL; AF486323; AAL96628.1;

SEQUENCE 158 AA; 19160 MW; AFF015533FC7FAF7 CRC6
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InterPro; L.
Fam; PF00518; E
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01-JUN-2002
01-JUN-2002
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EMBL; AJ242681; CAB45381.1; -.
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Papillomavirus
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          AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
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AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
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151 AA; 18320 MW;
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price RNA stage; Papillomaviridae;
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                   Watts K.J., Thompson C.H., Cossart Y.E., Rose B.R.;
"Sequence variation and physical state of human papillomavirus cervical cancer isolates from Australia and New Caledonia.";
Submitted (JUL-201) to the EMBL/GenBank/DDBJ databases.
EMBL; AF404693; AAL01343.1; -.
InterPro; IPR001334; E6.
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Chan P.K.S., Lam C.W., Cheung T.H., Li W.W.H., Lo K.W.K., Chan P.K.S., Lam C.W., Cheng A.F.;

Cheung J.L.K., xu L.Y., Cheng A.F.;

"Human papillomavirus type 16 intratypic variant infection for cervical neoplasia in Southern China.";

L Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databases.

EMBL; AF18786; AAF13392.1; -.

EMBL; AF486304; AAL96609.1; -.

EMBL; AF486305; AAL96609.1; -.

EMBL; AF486305; AAL96610.1; -.

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E6 protein.
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"Human papillomavirus type 16 intratypic variant infectifor cervical neoplasia in Southern China.";
Submitted (FEB-2002) to the EMBL/GenBanK/DDBJ databases.
EMBL; AF486307; AAL96612.1;
SEQUENCE 158 AA; 19187 MW; 005E2FC1E617C55B CRC64;
                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A. STRAIN=AS-G137;
                                                                                                                                                                                                                                                                                                               Papillomavirus. NCBI_TaxID=10581;
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Viruses; dsDNA viruses, no
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Search completed: December 13, 2002, 08:39:39 Job time: 50.1718 secs

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VE6_HPV31
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188.5	189.5	192	196	196.5	252	257	257	260	281	284	289
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21-JUL-1986
15-JUN-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Schneider-Maunoury S., Pehau-Arnaudet G., Breitburd F., Orth G.
"Expression of the human papillomavirus type 16 genome in SK-v
a line derived from a vulvar intraepithelial neoplasia.";
J. Gen. Virol. 71:809-817(1990).
-i- FUNCTION: THIS PROTEIN HAS TRANSFORMING ACTIVITY IN VITRO.
-i- FUNCTION: EXHIBIT A STRONG, BUT NON SPECIFIC AFFINITY FOR I
STRANDED DNA (IN VITRO).
-i- SUBCELLULAR LOCATION: Nuclear matrix-associated.
-i- MISCELLANEOUS: HPV16, IN COMPARISON TO HPV TYPES 6 AND 11,
OFTEN ASSOCIATED WITH MALIGNANT GENITAL CANCERS IN HUMANS.
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Papillomavirus.
NCBI_TaxID=10581;
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Seedorf K., Krammer G., Durst M.,
"Human papillomavirus type 16 DNA
                                                                                                                                                  Oncogene.
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Pfam; PF00518; E6; 1.
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P27228;
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                                                                                                               Oncogene.
                                                                                                                        Early protein; DNA-binding; Nuclear protein; Zinc-finger;
                                                                                                                                                                                           entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                                                                                                                                                                                                                          Marich J.E., Pontsler A.V., Rice S.M., McGraw K.A., Dubensky T.W.; "The phylogenetic relationship and complete nucleotide sequence of human papillomavirus type 35."; Virology 186:770-776(1992).
                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A. MEDLINE-92124753; PubMed-1310198;
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                                                                                                                                                                                                                                                                                             FUNCTION: THIS PROTEIN MAY BE INVOLVED IN THE ONCOGENIC POTENTIAL OF THIS VIRUS (ASSOCIATED WITH CANCER OF THE UTERINE CERVIX).
FUNCTION: EXHIBIT A STRONG, BUT NON SPECIFIC AFFINITY FOR DOUBLE
                                                                                                                                                                                                                                                                            SUBCELLULAR LOCATION: Nuclear matrix-associated.
                                                                                                                                                                                                                                                                                     FUNCTION: EXHIBIT A STRONG, BUT STRANDED DNA (IN VITRO).
          MFQDPAERPYKLHDLCNEVEESIHEICLNCVYCKQELQRSEVYDFACYDLCIVYREGQPY
                           MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNIY
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                                                         Similarity
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103
149
                                                                                                                                                                                                                                                                                                                                                                                          rected sequencing of human papillomavirus Microbiol. Immunol. 186:13-31(1994).
                                                Conservative
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139 F
18045 MW;
                                                         69.6%;
71.5%;
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D RNA stage; Papillomaviridae;
                                                14;
                                              Score 592; DB
Pred. No. 5.2e
14; Mismatches
                                                                                   POTENTIAL.
; C605D19AF3935021 CRC64;
                                                                                                       POTENTIAL.
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                                              .2e-50;
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VE6_HPV33

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RESULT 3
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P17386;
O1-AUG-1990
O1-AUG-1990
15-JUN-2002
                                                                                                                                                                                                                                                                                     Oncogene.
ZN_FING
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SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Goldsborough M.D., Disilvestre D., Temple G.F., Lorincz A.T.;
"Nucleotide sequence of human papillomavirus type 31: a cervical
neoplasia-associated virus.";
Virology 171:306-311(1989).
-i- FUNCTION: THIS PROTEIN MAY BE INVOLVED IN THE ONCOGENIC POTENTIAL
-i- FUNCTION: EXHIBIT A STRONG, BUT NON SPECIFIC AFFINITY FOR DOUBLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
MEDLINE-89299478; PubMed=2545036;
Goldsborough M.D., Disilvestre D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   entities requires a license agreement (Su or send an email to license@isb-sib.ch).
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PIR; A32444; W6WL31
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                                                                                                                                                                                                                                                                                                                                                                                Pfam;
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                    KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL
                                                                                      AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
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 KKKRFHNIGGRWTGRCIACWR--RPRTETQV
                                                                     GVCTKCLRFYSKVSEFRWYRYSVYGTTLEKLTNKGICDLLIRCITCQRPLCPEEKQRHLD
                                                                                                                                            MFKNPAERPRKLHELSSALEIPYDELRLNCVYCKGQLTETEVLDFAFTDLTIVYRDDTPH
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(Rel. 15, Last sequence update)
(Rel. 41, Last annotation update)
                                                                                                                                                                                                                 Conservative
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Pred. No. 7
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CO Papil

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Best Local
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01-JAN-1988
01-JAN-1988
15-JUN-2002
                                                                                           01-AUG-1992
01-AUG-1992
01-JUN-1994
                                                                                                                              VE6_HPV58
P26555;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Genome organization and nucleotide sequence of human papillom type 3, which is associated with cervical cancer.";
J. Virol. 58:991-995(1986),
-i- FUNCTION: THIS PROTEIN MAY BE INVOLVED IN THE ONCOGENIC POOF THIS VIRUS (CERVICAL NEOPLASIA-ASSOCIATED VIRUS),
-i- FUNCTION: EXHIBIT A STRONG, BUT NON SPECIFIC AFFINITY FOR STRANDED DNA (IN VITRO).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human papillomavirus type i Viruses; dsDNA viruses, no Papillomavirus.
                                               Viruses;
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InterPro; IPR001334; E6.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cole S.T., Streeck R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=86200464; PubMed=3009902;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=10586;
 SEQUENCE FROM N.A.
                      Papillomavirus.
NCBI_TaxID=10598;
                                                         Human papillomavirus
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(Rel. 23, Last sequence update)
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o RNA stage; Papillomaviridae;
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Pred. No. 1.
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                                               stage; Papillomaviridae;
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P36814;
01-JUN-1994
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01-NOV-1995
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PIR; E36779; W6WL58.
InterPro; IPR001334; E6.
Pfam; PF00518; E6; 1.

Pfam; PF00518; DNA-binding; Nuclear protein; Zinc-finger POTENTIAL.
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-i- FUNCTION: EXHIBIT A STRONG, BUT NON SPECIFIC
                           use by non-profit institutions as long modified and this statement is not removed entitles requires a license agreement (See or send an email to license@isb-sib.ch).
                                                                                                                            This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the Entrepean Bioinformatics Institute. There are no restude by non-profit institutions as long as its content
                                                                                                                                                                                                                                                                                                                             "Primer-directed sequencing of human papillomavirus types.";
Curr. Top. Microbiol. Immunol. 186:13-31(1994).
-i- FUNCTION: EXHIBIT A STRONG, BUT NON SPECIFIC AFFINITY FO
STRANDED DNA (IN VITRO).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
MEDLINE=94265501; PubMed=8205838;
Delius H., Hofmann B.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human papillomavirus typy Viruses; dsDNA viruses, Papillomavirus.
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    -!- SUBCELLULAR LOCATION: Nuclear matrix-associated

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    -!- SUBCELLULAR LOCATION: Nuclear matrix-associated.

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(Rel. 29, Last seq
(Rel. 32, Last ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
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                                                                                                                                                                                                                                                                                                                                                                     use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                    This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human papillomavirus ty Viruses; dsDNA viruses, Papillomavirus.
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Early protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Primer-directed sequencing of human papillomavirus types.";
Curr. Top. Microbiol. Immunol. 186:13-31(1994).
-i- FUNCTION: EXHIBIT A STRONG, BUT NON SPECIFIC AFFINITY FOR
STRANDED DNA (IN VITRO).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=10613;
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               FPNPEERPYKLPALCEEVNISIHEIELDCVYCERQLYRCEVYDFIFRDLCVVYRKGKPLG
                                    FQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPYA
                                                                                                                                                                                                                                                                                                             ; X74476; CAA52555.1;
S36515; S36515.
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S36573; S36573.
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POTENTIAL.
POTENTIAL.
                                                                                               Score 499; DB
Pred. No. 4.1e
17; Mismatches
                                                                                                                                                                                                                                              Nuclear protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 507; Db 1
                                                                                                                                                                                                     POTENTIAL.
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                                                                                                                  DB 1;
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RESULT 8
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                   Early protein;
ZN_FING 32
ZN_FING 105
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01-OCT-1996
01-NOV-1997
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P50804;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This SWISS-PROT entry is copyright. It is produced through a between the Swiss Institute of Bioinformatics and the EMBL the European Bioinformatics Institute. There are no restrict use by non-profit institutions as long as its content is
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"Human papillomavirus type 70 genome cl
products: complete nucleotide sequence
J. Clin. Microbiol. 34:802-809(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Longuet M., Beaudenon S., Orth G.;
"Two novel genital human papillomavirus (HPV)
related to the potentially oncogenic HPV39.";
J. Clin. Microbiol. 34:738-744(1996).
                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                 CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                   Ptam;
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MEDLINE=96249586; PubMed=8815087;
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Viruses; dsDNA viruse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=39457;
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Pfam; PF00518; E6;
                      122
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FUNCTION: EXHIBIT A STRONG, BUT STRANDED DNA (IN VITRO).
KQRFHNIRGRWTGRCMSCCRSS-----
                                                               ACQKCIKFHAKVRELRHYSNSVYATTLESITNTKLYNLSIRCMSCLKPLCPAEKLRHVNT
                                                                                                     VCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLDK 121
                                                                                                                                                 FPNPAERPYKLPDLCTALDTTLHDITIDCVYCKTQLQQTEVYEFAFSDLFIVYRNGEPYA
                                                                                                                                                                       FQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPYA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NKRFHQIADQWTGRCTQCWRPSAT 146
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                         Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         IPR001334;
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(Rel.
(Rel.
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2 68 POTENTIAL.
5 141 POTENTIAL.
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annotation
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Pred. No. 1.
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genomic organization.";
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KRRFHQIAGSYTGQCRHCWTSNREDRRRIRRETQV 158

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PESULT 10

VE6_HPV51

ID VE6_HPV51

AC P26554;

DT 01-AUG-1992;

DT 01-JUN-1994;

DT 01-JUN-1994;

DE E6 protein.

GN E6.

OS Human papillomavir:

OX NCBI_TaxID-1:
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01-0CT-1996
01-0CT-1996
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P54667;
                                                                                                                                                                                                                                                                                                                                                                                                                  Pfam; PF00518; E6; 1. Early protein; DNA-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Two novel genital human papillomavirus (HPV) types, HPV68 related to the potentially oncogenic HPV39.";
J. Clin. Microbiol. 34:738-744(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Papillomavirus.
NCBI_TaxID=45240;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Viruses;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E6 protein
Human papillomavirus typy Viruses; dsDNA viruses, Papillomavirus. NCBI_TaxID=10595;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          between
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A. MEDLINE-97060129; Pubmed-8904450;
                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                           InterPro; IPR001334; E6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; X67160; CAA47632.1; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Longuet M., Beaudenon S., Orth G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human papillomavirus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            European Bioinformatics Institute.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SWISS-PROT entry is copyright. It is produced through a collaborative en the Swiss Institute of Bioinformatics and the EMBL outstation
                                                                                                                                                                                    TKRRLHKIAGNFTGQCRHCWTSKREDRRRIRQETQV 158
                                                                                                                                                                                                                                                          AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
                                                                                                                                                                                                                                   AACQSCIKFYAKIRELRYYSESVYATTLETITNTKLYNLLIRCMSCLKPLCPAEKLRHLT
                                                                                                                                                                                                                                                                                  LFHNPEERPYKLPDLCRTLDTTLHDVTIDCVYCRRQLQRTEVYEFAFSDLCVVYRDGVPF
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158 AA;
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23, Last sequence
29, Last annotations
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55.1%;
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annotation
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                                                                                                                                                                                                                                                                                                                                                                                                       Nuclear protein; Zinc-finger POTENTIAL.
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                                                                                                                                                                                                                                                                                                                                                                                            POTENTIAL
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                                                                                                                        PRT;
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                                                                                                                                                                                                                                                                                                                                 41;
                                                                                                                                                                                                                                                                                                                                 Indels
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tent is in
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RESULT 11
VE6_HPV45
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Best Local
                                                                                                                                                                                                                                                                           01-MAY-1991
01-JUN-1994
15-JUN-2002
                                                                                                                                                                                                                                                                                                                  VE6_HPV45
P21735;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      InterPro; IPR001334; E6.

Pfam; PF00518; E6; 1.
Early protein; DNA-binding; Nuclear protein; Early protein; DNA-binding; Nuclear protein; ZN_FING 30 66 POTENTIAL.

ZN_FING 103 139 POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (see http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                    Kaplan J.B., Burk R.D.;
Submitted (AUG-1990) to the EMBI
Sibmitted (AUG-1990) to the EMBI
FUNCTION: THIS PROTEIN HAS 1
FUNCTION: EXHIBIT A STRONG,
STRANDED DNA (IN VITRO).
                                                                                                     Delius H., Hofmann B.; "Primer-directed sequencing of human papillomavirus "Primer-directed sequencing of human papillomavirus "Primer-Top. Microbiol. Immunol. 186:13-31(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                papillomavirus type 51.";
J. Virol. 65:4216-4225(1991).
-!- FUNCTION: EXHIBIT A STRONG,
STRANDED DNA (IN VITRO).
                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                             Papillomavirus.
NCBI_TaxID=10593;
                                                                                                                                                                                                                          Viruses;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; M62877; -; NOT_ANNOTATED_CDS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -!- SUBCELLULAR LOCATION: Nuclear matrix-associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lungu O., Crum C.P., Silverstein S.J.;
"Biologic properties and nucleotide sequence analysis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=91303675;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            [1]
SEQUENCE FROM N.A.
            <del>-</del>
                                                                                       SEQUENCE FROM N.A
                                                                                                                                                       MEDLINE=94265501; PubMed=8205838;
                                                                                                                                                                                                                                     Human papillomavirus
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          SUBCELLULAR LOCATION: Nuclear matrix-associated
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151 AA;
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(Rel.
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Last sequence up
Last annotation
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7 RNA
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                                                EMBL/GenBank/DDBJ databases
HAS TRANSFORMING ACTIVITY IN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 474; DB 1
Pred. No. 1e-38;
                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                         stage;
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                                      NON
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                                      SPECIFIC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 151;
                                      AFFINITY
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                                      DOUBLE
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RESULT VEG HVV ID HV ID HVV ID HV ID HVV ID HV ID H
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6_HPV18
                                                    SEQUENCE FROM N.A.
MEDLINE-88188247; Pub
Inagaki Y., Tsunokawa
Terada M., Sugimura J
                                                                                                                                                                                          MEDLINE-86306665; PubMed-3018129; Matlashewski G., Banks L., Wu-Liao J., S "The expression of human papillomavirus bacteria and the production of anti-E6 a J. Gen. Virol. 67:1909-1916(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CONFLICT
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ZN_FING
ZN_FING
CONFLICT
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                                                                                                                                                                                                                                                                                                                                                                                                 "Nucleotide sequence and comparative analysis of the human papillomavirus type 18 genome. Phylogeny of papillomaviruses repeated structure of the E6 and E7 gene products."; J. Mol. Biol. 193:599-608(1987).
                             Terada M., :
"Nucleotide
                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cole
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A. MEDLINE-87283882;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human papillomavirus ty
Viruses; dsDNA viruses,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-JAN-1988
15-JUN-2002
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EMBL; M38198; AAA46973.1;
PIR; S36561; S36561.
InterPro; IPR001334; E6.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S.T., Danos O.;
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protein; DNA-binding;
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                                                             Tsunokawa Y., Takebe
Sugimura T.;
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                                                                                                               PubMed=2833614;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PubMed-3039146;
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Last sequence update)
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D RNA stage;
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Pred. No. 1.2e
Pred. Mismatches
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I -> N (IN REF. 2).
R -> A (IN REF. 2).
F1CF10DD33AA4C3E (
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virus type 18 E6
i-E6 antibodies.
                             human
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                          papillomavirus type
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RESULT 13
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ID VE6_H
AC P2796
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Best Local
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EMBL; X05015; CAA28664.1;
EMBL; M20325; AAA99514.1;
EMBL; M26798; AAA46946.1;
EMBL; X04773; CAA28466.1;
EMBL; X04773; CAA28466.1;
EMBL; A06324; CAA00539.1;
EMBL; A06328; CAA00542.1;
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                                                                                                                                                                                                                                                                                                                                                                   EMBL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Grossman S.R., Laimins L.A.; "E6 protein of human papillomavirus Oncogene 4:1089-1093(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=87218459; PubMed=3034571; Seedorf K., Oltersdorf T., Kraemer G., Roewek "Identification of early proteins of the huma 16 (HPV 16) and type 18 (HPV 18) in cervical EMBO J. 6:139-144(1987).
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J. Virol. 62:1640-1646(1988).
                                                                                                                                                                                                                                                                                                                                               InterPro;
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                                                                     KRREHNIAGHYRGQCHSCCNRARQERLQRRRETQV
                                                                                                                                FQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPYA
                                                                                                                                                                                                                                                                                                                                                          G26251;
                                                                                            KORFHNIRGRWTGRCMSCCRSSR----TRRETQL 151
                                                                                                                     ACHKCIDFYSRIRELRHYSDSVYGDTLEKLTNTGLYNLLIRCLRCQKPLNPAEKLRHLNE
                                                                                                                                                                   FEDPTRRPYKLPDLCTELNTSLQDIEITCVYCKTVLELTEVFEFAFKDLFVVYRDSIPHA
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87; Conser
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email to license@isb-sib.ch).
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105
22
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141
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                                                                                                                                                                                                                                                                                                                                                                      22;
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Pred. No. 2.9e
22; Mismatches
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                                                                                                                                                                                                                                                                       POTENTIAL.
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5BCF13CF43D157FA CRC64;
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he human papilloma viruses
rvical carcinoma cells.";
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VE6_HPVME P27962;

STANDARD;

PRT;

158

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VEG_HPV39
ID VEG_H
AC P2483
DT 01-MA
DT 01-MA
DT 15-JU
DE 6 pr
GN E6
OS Human
OC Virus
OC Papill
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Best Local S
Matches 86
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01-MAR-1992
01-MAR-1992
15-JUN-2002
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ZN_FING 32
ZN_FING 106
SEQUENCE 158
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01-AUG-1992
01-JUN-1994
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Early
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Reuter S., Delius H., Kahn T., Hofmann B "Characterization of a novel human papil carcinoma cell line ME180.";
J. Virol. 65:5564-5568(1991).
-!- FUNCTION: EXHIBIT A STRONG, BUT NON STRANDED DNA (IN VITRO).
SEQUENCE FROM N.A.
MEDLINS-91135017; PubMed-1847266;
Volpers C., Streeck R.E.;
"Genome organization and nucleoti
type 39.";
                                                                                Human papillomavirus type : Viruses; dsDNA viruses, no
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                                                                       Papillomavirus
                                                                                                                                                                   VE6_HPV39
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                                                           NCBI_TaxID=10588;
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protein; DNA-binding; Nuclear
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Pred. No. 7e
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uman papillomavirus DNA
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P22159;
01-AUG-1991
01-AUG-1991
01-JUN-1994
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This SWISS-PROT entry is copyright. It is produced through a copyrend the swiss institute of Bioinformatics and the EMBL the European Bioinformatics Institute. There are no restrict use by non-profit institutions as long as its content is modified and this statement is not removed. Usage by and fo entitles requires a license agreement (See http://www.isb-sib.or send an email to license@isb-sib.ch).
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-!- SUBCELLULAR LOCATION: Nuclear matrix-associat
                                                                                                                                                                                                                                                                      Ostrow R.S., Labresh K.V., Faras A.J.;
"Characterization of the complete Rhy1 genomic integration locus from a metastatic tumor.";
Virology 181:424-429(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                Papillomavirus.
NCBI_TaxID=10570;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -i- FUNCTION: THIS PROTEIN MAY BE INVOLVED IN THE ONCOGENIC POTENTIAL OF THIS VIRUS (CERVICAL NEOPLASIA-ASSOCIATED VIRUS).
-i- FUNCTION: EXHIBIT A STRONG, BUT NON SPECIFIC AFFINITY FOR DOUBLE STRANDED DNA (IN VITRO).
                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A. MEDLINE=91135018; PubMed=1847267;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Viruses; dsDNA viruses,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oncogene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pfam; PF00518; E6; 1.
Early protein; DNA-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; M62849; AAA47050.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -!- SUBCELLULAR LOCATION: Nuclear matrix-associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Virology 181:419-423(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rhesus papillomavirus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KQRFHNIRGRWTGRCMSCCRSSR----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLDK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FHNPAERPYKLPDLCTTLDTTLQDITIACVYCRRPLQQTEVYEFAFSDLYVVYRDGEPLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A38502; W6WL39.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KRRFHKIAGSYTGQCRRCWTTKREDRRLTRRETQV
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Last sequence up
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s, no RNA stage; Papillomaviridae;
                                                                                                                                                                                                      Nuclear matrix-associated
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20; Mismatches
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POTENTIAL.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   update)
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E6 protein - E6 pr		166	156	207	157	141	139	161	140	156	141	138	152	148	150	150	142
E6 protein - E6 pr		N	μ	N	N	2	ш	N	Н	۲	2	N	N	N	۳	Ļ	N
E6 protein - E6 pr	ALIGN	S36485	W6WL47	S28510	S36538	S36473	W6WLB2	S36491	M6ML	W6WL41	S36479	S36567	S36550	S36532	W6WL42	W6WL13	S36509
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RESULT W6WLHS

C:Superfamily: papillomavirus E6 protein C;Keywords: DNA binding; early protein; zinc F;37-73/Region: zinc finger CCCC motif F:110-146/Region: zinc finger CCCC motif A:Molecule type: DNA A:Rosidues: I-158 <SEE> A:Rosidues: I-158 <SEE> A:Cross-references: GB:K02718; NID:g333031; PIDN:AAA46939.1; PID:g333032 A:Cross-references: GB:K02718; NID:g333031; PIDN:AAA46939.1; PID:g333032 R:Kennedy, I.M.; Haddow, J.K.; Clements, J.B. J. Virol. 65, 2093-2097, 1991 A:Title: A negative element in the human poapillomavirus type 16 genome a A:Reference number: Z17014; MUID:91162763; PMID:1848319 A:Accession: T10427 protein E6 - human papillomavirus type 16 C;Species: human papillomavirus type 16 C;Date: 28-May-1986 #sequence_revision 28-May-1986 #text_change C;Accession: A03682; T10427 R;Seedorf, K.; Krammer, G.; Durst, M.; Suhai, S.; Rowekamp, W.G. A;Cross-references: EMBL:K02718; C;Genetics: R;Seedorf, K.; Krammer, G.; Durst, M.; Suhai, S.; Rowek Virology 145, 181-185, 1985 A;Title: Human papillomavirus type 16 DNA sequence. A;Reference number: A22355; MUID:85246220; PMID:2990099 A; Molecule type: DNA A; Residues: 1-158 <KEN> A; Gene: E6 A; Status: preliminary; translated A; Accession: A03682 Query Match Best Local 9 Matches 150; Similarity Conservative 99.18; NID: g333031; 0; Score 843; Pred. No. 8 from GB/EMBL/DDBJ Mismatches finger DB 1; .3e-69; PIDN:AAA46939.1; PID:g333032 Length 158 Indels 20-Aug-1999 genome acts at the Gaps 60 67 0;

RESULT 2

MGWL35

B6 protein - human papillomavirus type :
C/Species: human papillomavirus type 35
A;Note: host Homo sapiens (man)

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KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151 KKORFHNIRGRWTGRCMSCCRSSRTRRETQL

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A;Molecule type: DNA
A,Residues: 1-149 <GOL>
A;Cross-references: GB:J04353; NID:g333048; PIDN:AAA46950.1; PID:g459916
A;Cross-references: GB:J04353; NID:g333048; PIDN:AAA46950.1; PID:g459916
C:Comment: This protein may be involved in the oncogenic potential of this virus.
C;Superfamily: papillomavirus E6 protein
C;Keywords: DNA binding; early protein; zinc finger
F;30-66/Region: zinc finger CCCC motif
F;103-139/Region: zinc finger CCCC motif
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C; Accession: E40824; S35521
R; Marich, J.E.; Pontsler, A.V.; Rice, S.M.;
Virology 186, 770-776, 1992
A; Title: The phylogenetic relationship and
A; Reference number: A40824; MUID:92124753;
A; Accession: E40824
                                                                                                                                                                                                                                                                                                                                                                               Virology 171, 306-311, 1989
A;Title: Nucleotide sequence of human papillomavirus type 31: a cervical neoplasia-assoc A;Reference number: A94398; MUID:89299478; PMID:2545036
A;Accession: A32444
A;Status: translation not shown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Cross-references: EMBL:X74477; NID:g396997; PIDN:CAA52561.1; PID:g396998
A;Experimental source: strain 35H
C;Superfamily: papillomavirus E6 protein
C;Keywords: DNA binding; early protein; zinc finger
F;30-66/Region: zinc finger CCCC mottif
F;103-139/Region: zinc finger CCCC mottif
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submitted to the EMBL Data Library, August 1993
A;Description: Primer-directed sequencing of human
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W6WL31
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C;Accession: A32444
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A; Residues: 1-149 <DEL>
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A;Accession: S36521
A;Status: preliminary
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A; Residues: 1-149 <MAR>
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                                MFKNPAERPRKLHELSSALEIPYDELRLNCVYCKGQLTETEVLDFAFTDLTIVYRDDTPH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      h, M.D.; DiSilvestre, D.; Temple, G.F.; Lorincz, A.T. 306-311, 1989
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                                                                                                                                          63.2%;
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71.5%;
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Pred. No. 2.9e
14; Mismatches
                                                                                                                       Score 538; DB 1;
Pred. No. 2.1e-41;
8; Mismatches 32
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2.9e-46;
hes 27;
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MFQDAEEKPRTLHDLCQALETSVHEIELKCVECKKTLQRSEVYDFVFADLRIVYRDGNPF

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A; Note: host Homo sapiens (man)
C; Date: 31-Mar-1992 #sequence_revision 31-i
C; Accession: B36779
R; Kirii, Y:; Iwamoto, S.; Matsukura, T.
Virology 185, 424-427, 1991
A; Title: Human papillomavirus type 58 DNA:
A; Reference number: A36779; MUID:92024102;
A; Accession: E36779
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W6WL58
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R;Cole, S.T.; Streeck, R.E.
J. Virol. 58, 991-995, 1986
A;Title: Genome organization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E6 protein - human papillomavirus type C;Species: human papillomavirus type 33 C;Date: 30-Jun-1987 #sequence_revision
                                                                                                           C; Keywords: DNA binding; early protein; zinc F; 30-66/Region: zinc finger CCCC motif
                                                                                                                                          A;Cross-references: GB:D90400; NID:g222386; PIDN:BAA31845.1; PID:g3337098 C;Superfamily: papillomavirus E6 protein
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A; Residues: 1-149 <KIR>
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A; Residues: 1-149 <COL>
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                                                 Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GICKLCLRFLSKISEYRHYNYSVYGNTLEQTVKKPLNEILIRCIICQRPLCPQEKKRHVD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKFLCDLLIRCINCQKFLCFEEKQRHLD 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KKORFHNIRGRWTGRCMSCCRSSRTRRETQL 151
                                 Similarity
95; Conserv
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                                   Conservative
                                                60.6%;
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63.6%;
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ype 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          type
ype 33
                                                Score 516; DB 1
Pred. No. 2e-39;
                                                 Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 534; DB 1;
Pred. No. 4.8e-41;
                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
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33
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-Jun-1987
                                                                                                                                                                                                                                       sequence.
; PMID:1656594
                                                                                                                                                                                                                                                                                                                                                                                                                                            149
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PIDN: AAA46958.1;
                                                                                                                             finger
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                                                                DB 1;
                                   35;
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                                                                Length
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PID:g396990

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Gaps

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122

62

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E6 protein - human papillomavirus type 52 C;Species: human papillomavirus type 52 C;Date: 12-May-1994 #sequence_revision 12-May-1994 #text_change 03-May-1996 C;Accession: A61237 R;Takami, Y.; Kondoh, G.; Saito, J.; Noda, K.; Sudiro, T.M.; Sjahrurachman, A.; Warsa, Int. J. Cancer 48, 516-522, 1991 A;Title: Cloning and characterization of human papillomavirus type 52 from cervical car A;Reference number: A61237; MUID:91258022; PMID:1646174 A;Accession: A61237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Molecule type: DNA
A; Residues: 1-148 <TAK>
C; Superfamily: papillomavirus E6 protein
                                                                                                                                                                                                                                                                                            A;Cross-references: EMBL:X74481; NID:g397038; PIDN:CAA52585.1; PID:g397039 C;Superfamily: papillomavirus E6 protein C;Keywords: DNA binding; early protein; nucleus; zinc finger
                                                                                                                                                                                                                                                                                                                                                                                                                                          R;Delius, H.; Hofmann, B.
submitted to the EMBL Data Library, August 1993
A;Description: Primer-directed sequencing of human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            E6 protein - human papillomavirus type 52 C;Speciles: human papillomavirus type 52 C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 26-Aug-1999 C;Accession: S36573
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A; Residues: 1-148 < DEL>
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A; Accession: S36573
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    121 KKQRFHNIRGRWTGRCMSCCR 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
mes 89; Conserv
                                             61
                                                                                61 AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 120
                                                                                                                                                                                                                                     Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KKQRFHNIRGRWTGRCMSCCR 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LNKRFHNISGRWTGRCAVCWRP--RRRQTQV 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
                                           GVCIMCLRFLSKISEYRHYQYSLYGKTLEERVKKPLSEITIRCIICQTPLCPEEKERHVN 120
                                                                                                                              MFEDPATRPRTLHELCEVLEESVHEIRLQCVQCKKELQRREVYKFLFTDLRIVYRDNNPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MFEDPATRPRTLHELCEVLEESVHEIRLQCVQCKKELQRREVYKFLFTDLRIVYRDNNPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AVCKVCLRLLSKISEYRHYNYSLYGDTLEQTLKKCLNEILIRCIICQRPLCPQEKKRHVD
                                                                                                                                                                                                                  89;
                                                                                                                                                                                                                                     Similarity
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                                                                                                                                                                                                                                   59.6%;
63.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         59.6%;
                                                                                                                                                                                                               18;
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                                                                                                                                                                                                             Score 507; DB 2; L
Pred. No. 1.3e-38;
8; Mismatches 34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 507; DB 2; 1
Pred. No. 1.3e-38;
8; Mismatches 34;
                                                                                                                                                                                                                                                                                                                                                                                                                                               papillomavirus
                                                                                                                                                                                                                                                       Length 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 148;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R;Lungu, O.; Crum, C.P.; Silverstein, S.J.
J. Virol. 65, 4216-4225, 1991
A;Title: Biologic properties and nucleotide sequence analysis A;Reference number: A40415; MUID:91303675; PMID:1649326
A;Accession: E40415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: EMBL:X74476; NID:g396989; PIDN:CAA52555.1; C;Superfamily: papillomavirus E6 protein C;Keywords: DNA binding; early protein; nucleus; zinc finger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R;Delius, H.; Hofmann, B.
submitted to the EMBL Data Library, August 1993
A;Description: Primer directed sequencing of human papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      E6 protein - human papillomavirus type 34
C;Species: human papillomavirus type 34
C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 26-Aug-1999
                                                                                                                                                                                                                                                                                                                                      A;Cross-references: GB:M62877
C;Superfamily: papillomavirus E6 protein
C;Keywords: DNA binding: early protein; zinc finger
F;30-66/Region: zinc finger CCCC motif
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Species: human papillomavirus type
A;Note: host Homo sapiens (man)
C;Date: 31-Mar-1992 #sequence_revision
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W6WL51
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A; Residues: 1-151 <LUN>
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A; Residues: 1-148 <DEL>
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                                                                                                                                                                                                                                                                                                                  F;103-139/Region: zinc finger CCCC motif
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 62
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                                                               61
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                                                                                                                                                1 MFEDKRERPRTLHELCEALNVSMHNIQVVCVYCKKELCRADVYNVAFTEIKIVYRDNNPY
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AVCDKCLKFYSKYSEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
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                                                             AVCKQCLLFYSKIREYRRYSRSVYGTTLEAITKKSLYDLSIRCHRCQRPLGPEEKQKLVD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VCQPCLLFYSKVRQYRRYNQSVYGRTLENLTNKQLCNILIRCGKCQKPLCPLEKQRHVDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          human papillomavirus type 51
uman papillomavirus type 51
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                                                                                                                                                                                                                                                       Similarity
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                                                                                                                                                                                                                                   Conservative
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61.1%;
                                                                                                                                                                                                                               55.7%; Score 474; DB 1; 57.0%; Pred. No. 1.2e-35; tive 25; Mismatches 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 499; DB 2;
Pred. No. 6.7e-38;
.7; Mismatches 39;
                        151
                                                                                                                                                                                                                                   40;
                                                                                                                                                                                                                                                                        Length 151;
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of

human papillomavirus

Gaps

0;

120

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RESULT 10

$36561

E6 protein - human papillomavirus type 45

C; Species: human papillomavirus type 45

C; Species: human papillomavirus type 45

C; Accession: $36561

R; Delius, H.; Hofmann, B.

submitted to the EMBL Data Library, August 1993

A; Description: Primer-directed sequencing of human papillomavirus types.

A; Reference number: $36469

A; Accession: $36561
                                                                                                   C; Keywords: DNA bi
F; 32-68/Region: zi
F; 105-141/Region:
                                                                                                                                                                A;Cross-references: GB:X05015; NID:g60975; PIDN:CAA28664.1; PID:g60976 R;Matlashewski, G.; Banks, L.; Wu-Liao, J.; Spence, P.; Pim, D.; Crawfc J. Gen. Virol. 67, 1909-1916, 1986
A;Title: The expression of human papillomavirus type 18 E6 protein in k A;Reference number: A92791; MUID:86306665; PMID:3018129
A;Contents: annotation; identification of the protein C;Superfamily: papillomavirus E6 protein
                                                                                                                                                                                                                                                                                                                                                      A;Cross-references: GB:X04773; NID:g60876; PIDN:CAA28466.1; PID:g608?7 R;Cole, S.T.; Danos, O. J. Mol. Biol. 193, 599-608, 1987 J. Mol. Biol. 193, 599-608, 1987 A;Title: Nucleotide sequence and comparative analysis of the human papillomavirus A;Reference number: A9937; MUID:87283882; PMID:3039146 A;Accession: G26251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 11

#GWLI8

E6 protein - human papillomavirus type 18

C;Species: human papillomavirus type 18

C;Species: 30-Sep-1987 #sequence_revision 30-Sep-1987 #text_change

C;Accession: A26165; G26251

C;Accession: A26165; G26251
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A; Residues: 1-158 <CDEL>
A; Cross references: EMBL:X74479; NID:g397022; PIDN:CAA52573.1;
C; Superfamily: papillomavirus E6 protein; nucleus; zinc finger
C; Keywords: DNA binding; early protein; nucleus; zinc finger
                                                                                                                                                                                                                                                                                                               A; Molecule type: DNA
A; Residues: 1-158 <COL>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: DNA
A; Residues: 1-158 <SEE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Title: Identification of early proteins of the human papilloma A;Reference number: A91068; MUID:87218459; PMID:3034571 A;Accession: A26165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R;Seedorf, K.; Oltersdorf, T.; Kraemmer, G.; Roewekamp, EMBO J. 6, 139-144, 1987
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                                                                                                                           Keywords: DNA binding; early protein; transforming protein; zinc finger; 32-68/Region: zinc finger CCCC motif
                                         Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KQRFHNIRGRWTGRCMSCCRSS----RTRRETQL 151
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                       Conservative
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                                                                                                     finger CCCC
                                         55.2%;
56.1%;
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56.1%;
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                       22;
                                      Score 469.5; DB 1
Pred. No. 3.2e-35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 473.5; DB 2
Pred. No. 1.4e-35;
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                       Mismatches
                                                            DB 1;
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                                  C;Keywords: DNA binding; early protein; transforming F;32-68/Region: zinc finger CCCC motif F;105-141/Region: zinc finger CCCC motif
                                                                                                 A; Molecule type: DNA
A; Residues: 1-158 < VOL>
A; Cross-references: GB: M62849; EMBL: M38185;
C; Superfamily: papillomavirus E6 protein
                                                                                                                                                                      A;Reference number: A38502; MUID:91135017; PMID:1847266 A;Accession: A38502 A;Status: translation not shown A;Molecule trans
                                                                                                                                                                                                                                         k; Volpers, C.; Streeck, R.E. Virology 181, 419-423, 1991 A; Title: Genome organization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C;Superfamily: papillomavirus E6 protein C;Keywords: DNA binding; early protein; zinc F;32-68/Region: zinc finger CCCC motif
                                                                                                                                                                                                                                                                                                                                  A; Note: host Homo sapiens (man) C; Date: 31-Dec-1991 #sequence_revision
                                                                                                                                                                                                                                                                                                                                                                           E6 protein - human papillomavirus type C; Species: human papillomavirus type 39
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A; Residues: 1-158 <REU>
A; Cross-references: GB: M73258
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                                                                                                                                                                                                                                                                                     , c.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SKRRFHKIAGNFTGQCRHCWTSKREDRRRTRQETQV
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µman papillomavirus type ME180
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  54.5%;
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Pred. No. 7.3e-35;
2; Mismatches 43
  Score 463.5;
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R;Reuter, S.; Delius, H.; Kahn, T.; Hofmann, B.; zur Hausen, H.; Schwarz, E. J. Virol. 65, 5564-5568, 1991
A;Title: Characterization of a novel human papillomavirus DNA in the cervical carcino A;Reference number: A40509; MUID:91374616; PMID:1716694
A;Accession: C40509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C;Species: human papillomavirus type ME180
A;Note: host Homo sapiens (man)
C;Date: 30-Jun-1992 #sequence_revision 30-Jun-1992 #text_change 16-Feb-1997
C;Accession: C40509
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                                                                                                                                                                                                                                                                                                                                                                                                                                          31-Dec-1991 #text_change 16-Jul-1999
                                                                                                                                                                NID: 9333245; PIDN: AAA47050.1;
                                                                                                       protein;
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Length 158;
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WESULT 14
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W6WLR1
E6 protein - rhesus papillomavirus (type 1)
C;Species: rhesus papillomavirus
C;Species: rhesus papillomavirus
C;Species: 1-Dec-1991 #sequence_revision 31-Dec:1991 #text_change 16-Feb-1997
C;Accession: A38503
R;Ostrow, R.S.; LaBresh, K.V.; Faras, A.J.
Virology 181, 424-429, 1991
A;Title: Characterization of the complete RhPV 1 genomic sequence and an integration A;Title: Characterization not shown
A;Reference number: A38503; MUID:91135018; PMID:1847267
A;Accession: A38503
A;Status: translation not shown
A;Molecule type: DNA
A;Residues: 1-91 <0ST>
A;Cross_references: EMBL:M37717
C;Superfamily: papillomavirus E6 protein
C;Keywords: DNA binding; early protein; transforming protein; zinc finger
F;60-96/Region: zinc finger CCCC motif
F;133-169/Region: zinc finger CCCC motif
                                                                         R;Delius, H.; Hofmann, B.
submitted to the EMBL Data Library, August 1993
A;Description: Primer-directed sequencing of human papillomavirus types.
A;Reference number: $36469
A;Accession: $36544
A;Accession: $36544
A;Molecule type: DNA
A;Mesidues: 1-150 <DEL>
A;Cross-references: EMBL:X74472; NID:g396956; PIDN:CAA52530.1; PID:g396957
C;Superfamily: papillomavirus E6 protein
C;Keywords: early protein; zinc finger
                                                                                                                                                                                                                                                                               RESULT 15
336544
RESULT 15
34544
RESULT 15
RSGECIES: human papillomavirus type 26
C;Species: human papillomavirus type 26
C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 26-Aug-1999
C;Accession: S36544
R;Delius, H.; Hofmann, B.
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  Query Match 52.9%; 50
Best Local Similarity 55.0%; Pa
Matches 83; Conservative 25;
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  Score 450.5; DB 2;
Pred. No. 1.6e-33;
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